

chain nodes :

1 10 14 15

ring nodes :

2 3 4 5 6 7 16 17

chain bonds :

15-16

ring bonds :

2-7 2-3 3-4 4-5 5-6 6-7

exact/norm bonds :

2-7 2-3 3-4 4-5 5-6 6-7 15-16

isolated ring systems :

containing 2 :

G1:[*1],[*2]

G2:C,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 10:CLASS

11:CLASS 14:CLASS 15:CLASS 16:Atom 17:Atom 20:CLASS

Generic attributes :

1:
Type of Ring System : Polycyclic

Element Count :

Node 1: Limited

0,01

09/980,451

=> d his

(FILE 'HOME' ENTERED AT 12:06:52 ON 23 SEP 2003)

FILE 'REGISTRY' ENTERED AT 12:07:02 ON 23 SEP 2003

FILE 'STNGUIDE' ENTERED AT 12:14:26 ON 23 SEP 2003

FILE 'REGISTRY' ENTERED AT 12:16:54 ON 23 SEP 2003

FILE 'STNGUIDE' ENTERED AT 12:18:05 ON 23 SEP 2003

FILE 'REGISTRY' ENTERED AT 12:19:18 ON 23 SEP 2003

L1 603986 S 46.156.1/RID
L2 SCREEN 1840
L3 STRUCTURE UPLOADED
L4 QUE L3 AND L2
L5 1 S L4
L6 1 S L4 SUB=L1 SAM
L7 226 S L4 SUB=L1 FUL

FILE 'CAPLUS' ENTERED AT 12:31:11 ON 23 SEP 2003

L8 36 S L7
L9 15 S VERSCHUEREN W?/AU
L10 1 S L8 AND L9
SELECT RN L10 1-

FILE 'REGISTRY' ENTERED AT 12:31:49 ON 23 SEP 2003

L11 52 S E1-52
L12 27 S L11 AND NRS>2
L13 25 S L11 NOT L12

FILE 'CAPLUS' ENTERED AT 12:32:53 ON 23 SEP 2003

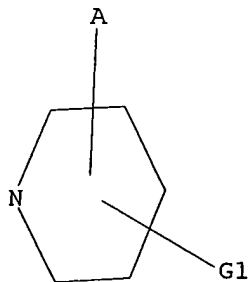
L14 2 S L12
L15 37 S L8 OR L14

=> d 14

L4 HAS NO ANSWERS

L2 SCR 1840
L3 STR

Hy



1—N

N 2

G1 [01],[02]

G2 C,S

09/980,451

Structure attributes must be viewed using STN Express query preparation.
L4 QUE ABB=ON PLU=ON L3 AND L2

=> d ibib abs hitstr 115 1-37

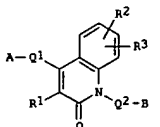
ANSWER 1 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:472358 CAPLUS
DOCUMENT NUMBER: 139:53025
TITLE: Preparation of vanilloid receptor ligands and their use in treatments
INVENTOR(S): Bo, Yunxin Y.; Chakrabarti, Partha P.; Chen, Ning; Doherty, Elizabeth M.; Fotsch, Christopher H.; Han, Nianhe; Kelly, Michael G.; Liu, Qingyan; Norman, Mark Henry; Wang, Xianghong; Zhu, Jiwang
PATENT ASSIGNEE(S): Amgen Inc., USA; Osnysanov, Vassil I.; et al.
SOURCE: PCT Int. Appl., 611 pp.
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|------------|
| WO 2003049702 | A2 | 20030619 | WO 2002-US39589 | 20021210 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 2001-339161P | P 20011210 |
| | | | US 2001-344737P | P 20011221 |
| | | | US 2002-383331P | P 20020522 |
| | | | US 2002-402422P | P 20020808 |

OTHER SOURCE(S): MARPAT 139:53025
AB Claimed are compds. having the general structure R1CR2:CR3C:(X)YR4 or R1R2CHCR3R3C:(X)YR4 (1; variables defined below; e.g. (2E)-3-[4-(tert-butyl)phenyl]-N-phenylprop-2-enamide and (2,3-dihydrobenzo[1,4]dioxin-6-yl)[4-(4-dimethylaminophenyl)pyridin-2-yl]amine) and compns. contg. them, for the treatment of acute, inflammatory and neuropathic pain, dental pain, general headache, migraine, cluster headache, mixed-vascular and nonvascular syndromes, tension headache, general inflammation arthritis, rheumatic diseases, osteoarthritis, inflammatory bowel disorders, inflammatory eye disorders, inflammatory or unstable bladder disorders, psoriasis, skin complaints with inflammatory components, chronic inflammatory conditions, inflammatory pain and assocd. hyperalgesia and allodynia, neuropathy pain and assocd. hyperalgesia and allodynia, diabetic neuropathy pain, causalgia, sympathetically maintained pain, deafferentation syndromes, asthma, epithelial tissue damage or dysfunction, herpes simplex, disturbances of visceral motility at respiratory, genitourinary, gastrointestinal or vascular regions, wounds, burns, allergic skin reactions, pruritis, vitiligo, general gastrointestinal disorders, gastric ulceration, duodenal ulcers, diarrhea, gastric lesions induced by necrotizing agents, hair growth, vasomotor or allergic rhinitis, bronchial disorders or bladder disorders. 1 are

ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:389980 CAPLUS
DOCUMENT NUMBER: 138:401612
TITLE: Preparation of carbostyryl derivatives and their use as oxytocin antagonists and therapeutics for treatment of premature delivery, miscarriage, dysmenorrhea, and galactorrhea
INVENTOR(S): Shiraiwa, Masafumi; Ota, Shuji; Takefuchi, Ken; Uchida, Hiroshi; Saegusa, Mamoru; Mitsubori, Tomohiro; Yoshizawa, Masayuki
PATENT ASSIGNEE(S): Teikoku Hormone Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 142 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

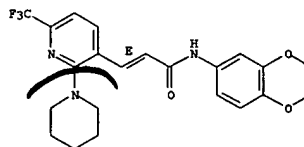
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------------|------|----------|-----------------|----------|
| JP 2003146972 | A2 | 20030521 | JP 2001-348850 | 20011114 |
| PRIORITY APPLN. INFO.: | | | | |
| OTHER SOURCE(S): MARPAT 138:401612 | | | | |



AB Title derivs. I [Q1 = bond, CH2, CH2CH2, vinyl, CHMe, etc.; A = lower alkyl, (un)substituted cycloalkyl (condensed with hydrocarbyl ring), (un)substituted aryl, (un)substituted heterocyclyl (condensed with hydrocarbyl ring); R1 = H, lower alkyl; R2, R3 = H, (un)substituted lower alkyl(aryl), aralkyl, piperidinyl, etc.; R2R3 may be linked to form lower alkylenedioxy; Q2 = bond, CH2, CH2CH2, etc.; B = CO2H, lower alkoxy, carbonyl, (un)substituted 2-pyridinyl, (un)substituted Ph, (un)substituted cyclohexyl, etc.) or their salts are claimed. The derivs. are also useful for termination of delivery prior to Caesarean section. Thus, 4-(2,3-dimethoxyphenyl)-7-methoxy-2-oxoquinoline was treated with Me 4-bromomethylbenzoate to give 564 I (A-Q1 = 2,3-dimethoxyphenyl, R1-R3 = H, Q2B = 4-CH2CO2H(CO2Me), which inhibited binding of [3H]-oxytocin to its receptor with IC50 of 0.972 μ M.mol/L.
IT 528826-56-4P 528826-68-8P 528826-71-3P
 528826-72-4P 528826-74-6P 528826-76-8P
 528826-78-0P 528826-82-6P 528826-83-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of carbostyryl derivs. as oxytocin antagonists)
RN 528826-56-4 CAPLUS
CN Acetamide, N-[1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-

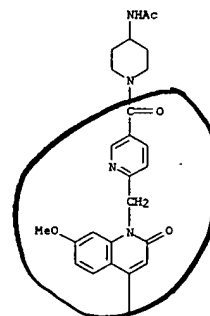
ANSWER 1 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 thought to be vanilloid receptor ligands, but no test data are provided. Although the methods of prepn. are not claimed, approx. 130 example prepn. and characterization data for approx. 400 I are included. For I: R1 is Ph, naphthyl or (un)satd. 5- or 6-membered ring heterocycle; R2 is H, hydroxy, halo, Cl-6alkyl, or (un)satd. 5- or 6-membered ring heterocycle; or R1 and R2 together are o-benzenediyl-L1-o-benzenediyl. R3 is H or Cl-4alkyl; or R1 and R3 together are o-benzenediyl-L2- or -Z-L2- (Z = pyridine-2,3-diyl). R4 is Ph, (un)satd. 5- or 6-membered ring heterocycle, 10-membered bicyclic ring comprising fused 6-membered rings, contg. 0-4 N atoms with the remainder being C atoms, with at least one of the 6-membered rings being arom.; X is O, S or NRA; Y is NH or O; addnl. details including provisos are given in the claims.
IT 545398-77-4P, (2E)-N-(2,3-Dihydro-1,4-benzodioxin-6-yl)-3-(2-(piperidino)-6-(trifluoromethyl)pyridin-3-yl)prop-2-enamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug candidate; prepn. of vanilloid receptor ligands and their use in medical treatments)
RN 545398-77-4 CAPLUS
CN 2-Propenamide, N-(2,3-dihydro-1,4-benzodioxin-6-yl)-3-[(1-piperidinyl)-6-(trifluoromethyl)-3-pyridinyl]-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 1(2H)-quinolinylmethyl]-3-pyridinyl]carbonyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

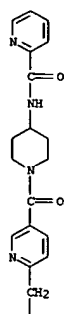


RN 528826-68-8 CAPLUS
CN 2-Pyridinecarboxamide, N-[1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

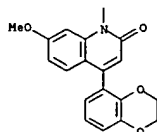
L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

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PAGE 1-A



PAGE 2-A



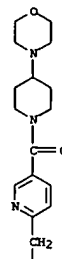
RN 528826-71-3 CAPLUS

CN Piperidine, 1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-4-(4-morpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

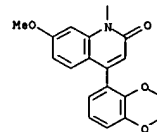
L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

PAGE 1-A



PAGE 2-A



● HCl

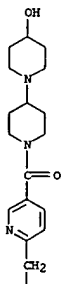
RN 528826-72-4 CAPLUS

CN [1,4'-Bipiperidin]-4-ol, 1'-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

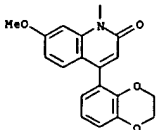
L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

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PAGE 1-A



PAGE 2-A



● HCl

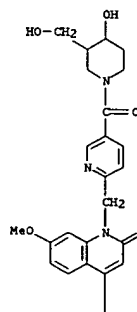
RN 528826-74-6 CAPLUS

CN 3-Piperidinemethanol, 1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-4-hydroxy-, monohydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

PAGE 1-A



PAGE 2-A

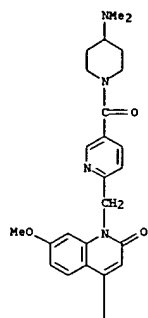


RN 528826-76-8 CAPLUS

CN 4-Piperidinamine, 1'-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-N,N-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

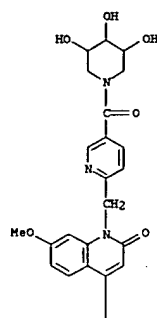


● HCl

RN 528826-78-0 CAPLUS
 CN 3,4,5-Piperidinetriol, 1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-3-hydroxy-, ethyl ester (9CI) (CA INDEX NAME)

L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



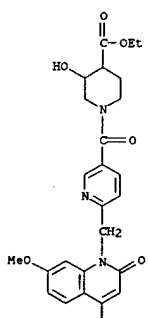
PAGE 2-A



RN 528826-82-6 CAPLUS
 CN 4-Piperidinecarboxylic acid, 1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-3-hydroxy-, ethyl ester (9CI) (CA INDEX NAME)

L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



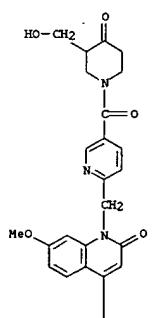
PAGE 2-A



RN 528826-83-7 CAPLUS
 CN 4-Piperidinone, 1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-3-(hydroxymethyl)-, ethyl ester (9CI) (CA INDEX NAME)

L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



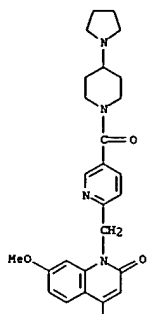
PAGE 2-A



IT 528826-60-0 528826-61-1 528826-62-2
 528826-63-3 528826-70-2
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (prepn. of carbostyryl derivs. as oxytocin antagonists)
 RN 528826-60-0 CAPLUS
 CN Piperidine, 1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-4-(1-pyrrolidinyl)-, dihydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

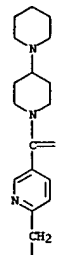


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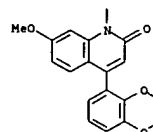
RN 528826-61-1 CAPLUS
 CN 1,4'-Bipiperidine, 1'-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



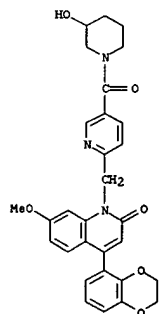
● 2 HCl

RN 528826-62-2 CAPLUS
 CN 3-Piperidinol, 1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A



● HCl



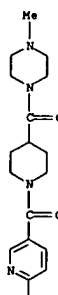
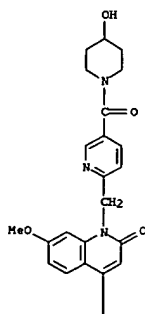
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RN 528826-70-2 CAPLUS
 CN Piperazine, 1-[[1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-4-piperidinyl]carbonyl]-4-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

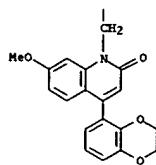
RN 528826-63-3 CAPLUS
 CN 4-Piperidinol, 1-[[6-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-7-methoxy-2-oxo-1(2H)-quinolinyl]methyl]-3-pyridinyl]carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



L15 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

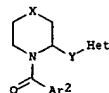
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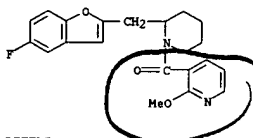
15 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 2003:22875 CAPLUS
 DOCUMENT NUMBER: 138:89803
 TITLE: Preparation of aroylazoles and aroylazines as orexin receptor antagonists
 INVENTOR(S): Branch, Clive Leslie; Chan, Vai Ngor; Johns, Amanda; Johnson, Christopher Norbert; Nash, David John; Novelli, Riccardo; Pilleux, Jean-Pierre; Porter, Roderick Alan; Stead, Rachel Elizabeth Anne; Stemp, Geoffrey
 PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK
 SOURCE: PCT Int. Appl., 74 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2003002561 | A1 | 20030109 | WO 2002-EP7009 | 20020625 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GR, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, NG, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: GB 2001-15863 A 20010628 | | | | |
| OTHER SOURCE(S): MARPAT 138:89803 | | | | |
| GI | | | | |



AB Title compds. [1: X = bond, O, NR3, (CH2)n; n = 1-3; Y = CH2, CO, CH(OH), CH2CH(OH) Het = (substituted) bicyclic heteroaryl group contg. 1-toreq.4 N, O, d S; Ar2 = (substituted) Ph, 5-6 membered heterocyclyl contg. 1-toreq.3 N, O, S; with provisoes], were prepd. as orexin-1 receptor antagonists (no data). Thus, 5-(4-fluorophenyl)-2-methylthiazole-4-carbonyl chloride, 2-(2-benzofurylmethyl)piperidine, and Et3N were shaken 30 min. in CH2Cl2 to give 244 2-(2-benzofurylmethyl)-1-[(5-(4-fluorophenyl)-2-methylthiazol-4-yl)carbonyl]piperidine.
 IT 483279-97-6P

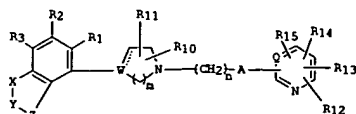
L15 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of aroylazoles and aroylazines as orexin receptor antagonists)
 RN 483279-97-6 CAPLUS
 CN Piperidine, 2-[(5-fluoro-2-benzofuranyl)methyl]-1-[(2-methoxy-3-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

15 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 2003:22870 CAPLUS
 DOCUMENT NUMBER: 138:89820
 TITLE: Preparation of heteroaryl derivatives as 5-HT1A antagonists, potent serotonin reuptake inhibitors, and which show affinity for the dopamine D4 receptor
 INVENTOR(S): Rottlaender, Mario; Moltzen, Ejner Knud; Mikkelsen, Ivan; Ruhland, Thomas; Andersen, Kim; Krog-Jensen, Christian
 PATENT ASSIGNEE(S): H. Lundbeck A/S, Den.
 SOURCE: PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2003002556 | A1 | 20030109 | WO 2002-DK435 | 20020627 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GR, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, NG, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: DK 2001-1036 A 20010629 | | | | |
| OTHER SOURCE(S): MARPAT 138:89820 | | | | |
| GI | | | | |



AB Heteroaryl deriva. [1: wherein A = O, S; n = 2, 3, 4, 5, 6, 7, 8, 9, 10; m = 2, 3; V, Q, independently = H, C, CH3; X = O, amino, S, CR4R5; Y = CR6R7, CR6R7-CR8R9, CR6:CR7, COCR6R7; or X and Y together form a group CR4:CR5, CR4:CR5-CR6R7; Z = O, S; R1, R2, R3, R4, R5, R6, R7, R8, R9, independently = H, (C1-C6)alkyl, (C2-C6)alkenyl, (C2-C6)alkynyl, (C3-C8)cycloalkyl, (C1-C6)alkyl, aryl(C1-C6)alkyl, acyl, etc.; R10, R11, independently = H, (C1-C6)alkyl, or may together form a bridge consisting of two or three methylene groups; R12, R13, R14, R15 = H, halo, cyano, nitro, hydroxy, (C1-C6)alkyl, (C1-C6)alkoxy, etc.] were prepd. For example,

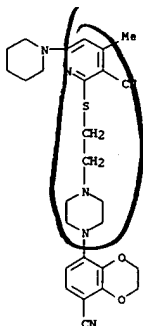
L15 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 4,6-dimethyl-2-[(2-methylsulfonyl)nicotinonitrile (synthetic prepn. given) is reacted with 4-[(2,3-dihydrobenzo[1,4]dioxin-5-yl)piperazine to give 2-[(2-[(4-[(2,3-dihydrobenzo[1,4]dioxin-5-yl)piperazin-1-yl]ethylsulfonyl)-6-methylnicotinonitrile (II)]. The prepd. compds. are potent serotonin reuptake inhibitors and exhibit high affinity for 5-HT1A receptors and the dopamine D4 receptor and, thus, are useful for the treatment of affective disorders such as general anxiety disorder, panic disorder, obsessive compulsive disorder, depression, social phobia and eating disorders, and neurol. disorders such as psychosis. For example, compd. II showed good inhibition of 3H-5-HT uptake into rat brain synaptosomes (IC50 < 20 nM).

IT 484030-69-5P 484030-79-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of benzodioxinyl piperazinyl heteroaryl derivs. as 5-HT1A antagonists, potent serotonin reuptake inhibitors, and which show affinity for dopamine D4 receptor)

RN 484030-69-5 CAPLUS

CN 3-Pyridinecarbonitrile, 2-[[2-[(4-(8-cyano-2,3-dihydro-1,4-benzodioxin-5-yl)-1-piperazinyl]ethyl]thio]-4-methyl-6-(1-piperidinyl)- (SCI) (CA INDEX NAME)



RN 484030-79-7 CAPLUS

CN 3-Pyridinecarbonitrile, 2-[[2-[(4-(2,3-dihydro-1,4-benzodioxin-5-yl)-1-piperazinyl]ethoxy]-4-methyl-6-(1-piperidinyl)- (9CI) (CA INDEX NAME)

ANSWER 5 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

APPLICATION NUMBER: 2002:465994 CAPLUS

DOCUMENT NUMBER: 137:33326

TITLE: Preparation of chiral alkylaminochroman derivatives as .beta.3 adrenoceptor agonists
 INVENTOR(S): Ladouceur, Gaetan H.; Bullock, William H.; Magnuson, Steven R.; O'Connor, Stephen J.; Smith, Roger A.; Shen, Quanrong; Liu, Qingjie; Su, Ning; Velthuisen, Emil J.; Campbell, Ann-Marie; Ehrlich, Paul P.

PATENT ASSIGNER(S): Bayer Corporation, USA

SOURCE: PCT Int. Appl., 139 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2002048134 | A2 | 20020620 | WO 2001-US46623 | 20011207 |
| WO 2002048134 | A3 | 20030206 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TH, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2002028816 | A5 | 20020624 | AU 2002-28816 | 20011207 |
| US 2003078258 | A1 | 20030424 | US 2001-8928 | 20011207 |
| EP 1343778 | A2 | 20030917 | EP 2001-989934 | 20011207 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

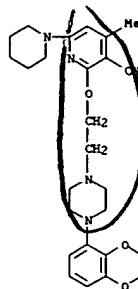
PRIORITY APPLN. INFO.: US 2000-254735P P 20001211

WO 2001-US46623 W 20011207

OTHER SOURCE(S): MARPAT 137:33326

GI

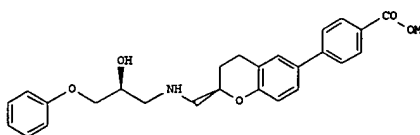
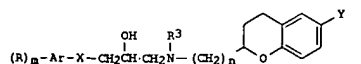
L15 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



REFERENCE COUNT: 1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



AB Title compds. [I: Ar = C6H5, heterocycle, benzoheterocycle; Y = halo, OR1, COOR1, CH2CH2COOH, 4-C6H4COOH, 4-C6H4COOCH3, 3-C6H4COOH, 2-naphthyl-6-carboxylic acid, etc.; m = 0, 1, 2, 3, 4, 5; n = 1, 2, 3; X = O, S, S=O, SO2; R = OH, halo, CN, NO2, CF3; R1 = H, (CH2)nO(CH2)nCOOH, (CH2)nO(CH2)nH; R2 = R1, OR1, NR1R1, alkoxy, halo, NO2; R3 = H, alkyl, C6H5CH2, COR2] are prepd. as .beta.3 adrenoceptor agonists. Title compds. I are useful in a pharmaceutical compn. for the treatment of diabetes, impaired fasting glucose, impaired glucose tolerance, obesity, hypertriglyceridemia, hypercholesterolemia, hypercholesterolemia, lowering high-d. lipoprotein levels, atherosclerosis, cardiovascular diseases and related diseases, gastrointestinal disorders, neuro genetic inflammation, ocular hypertension, glaucoma, urol. disorders, benign prostatic hyperplasia, and, incontinence. Thus, the title compd. II was prepd. from (2R)-1-iodo-3,4-dihydro-2H-chroman-2-carboxylic acid, Me 4-iodobenzoate, and (2S)-1-amino-3-phenoxy-2-propanol via retn. and condensation. The title compd. II was tested for .beta.3 agonistic activity with EC50 .ltoreq. 1 .mu.M.

IT 437766-78-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

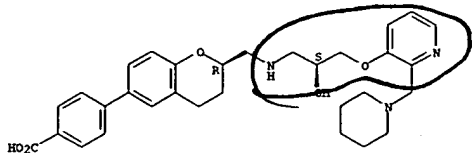
(prepn. of chiral aminoalkylchroman derivs. as .beta.3 adrenoceptor agonists)

RN 437766-78-4 CAPLUS

CN Benzoic acid, 4-[(2R)-3,4-dihydro-2-[[[(2S)-2-hydroxy-3-[[2-(1-piperidinyl)methyl]-3-pyridinyl]oxy]propyl]amino]methyl]-2H-1-benzopyran-6-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L15 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

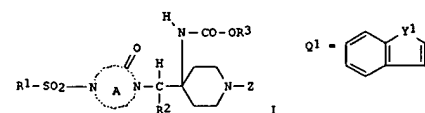


● HC1

ANSWER 6 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:368468 CAPLUS
 DOCUMENT NUMBER: 136:386135
 TITLE: Preparation of carbamate derivatives as inhibitors of activated blood coagulation factor X
 INVENTOR(S): Itoh, Fumio; Banno, Hiroshi; Kawamura, Masaki; Kitamura, Shuji
 PATENT ASSIGNER(S): Takeda Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 111 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

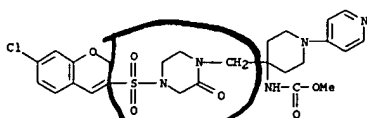
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2002038560 | A1 | 20020516 | WO 2001-JP9759 | 20011108 |
| W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CH, GA, GN, GQ, GW, ML, MR, NE, SH, TD, TG AU 2002014266 A5 20020521 AU 2002-14266 20011108 JP 2002220385 A2 20020809 JP 2001-343474 20011108 EP 1340753 A1 20030903 EP 2001-982745 20011108 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR PRIORITY APPLN. INFO.: JP 2000-341067 A 20001108 WO 2001-JP9759 W 20011108 OTHER SOURCE(S): MARPAT 136:386135 G1 | | | | |



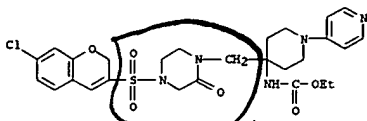
AB The title compds. I [R1 represents an optionally substituted group represented by Q1, etc.; Y1 represents CH3, etc.; the ring A represents an oxo-substituted nitrogen-contg. heterocycle optionally further substituted; R2 represents hydrogen, optionally substituted C1-4 alkyl, etc.; R3 represents optionally substituted C1-4 alkyl, etc.; and Z

L15 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 represents an optionally substituted nitrogen contg. heterocyclic group, etc.) are prepd. The process for prep. I is disclosed.
 4-(6-Chloronaphthalene-2-sulfonyl)-1-[[4-ethoxycarbonylamino-1-(4-pyridyl)-4-piperidylmethyl]-2-piperazinone showed IC50 of 0.0046 .mu.M against blood-coagulation factor Xa. Formulations are given.

IT 426263-62-9P 426263-63-0P 426263-64-1P
 426263-73-2P 426263-76-5P 426263-77-6P
 426263-81-2P 426263-82-3P
 RL: IMP (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of carbamate derivs. as inhibitors of activated blood coagulation factor X)
 RN 426263-62-9 CAPLUS
 CN Carbanic acid, [4-[[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinylmethyl]-1-(4-pyridinyl)-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)

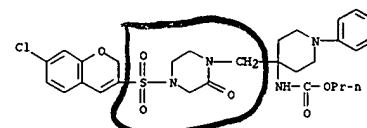


RN 426263-63-0 CAPLUS
 CN Carbanic acid, [4-[[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinylmethyl]-1-(4-pyridinyl)-4-piperidinyl]-, ethyl ester (9CI) (CA INDEX NAME)



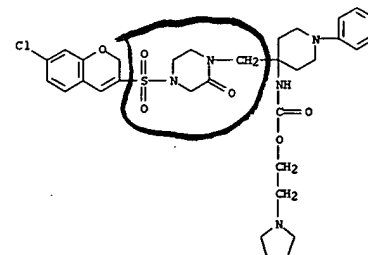
RN 426263-64-1 CAPLUS
 CN Carbanic acid, [4-[[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinylmethyl]-1-(4-pyridinyl)-4-piperidinyl]-, propyl ester (9CI) (CA INDEX NAME)

L15 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 426263-73-2 CAPLUS
 CN Carbanic acid, [4-[[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinylmethyl]-1-(4-pyridinyl)-4-piperidinyl]-, 2-(1-pyrrolidinyl)ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

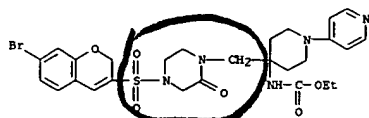
PAGE 1-A



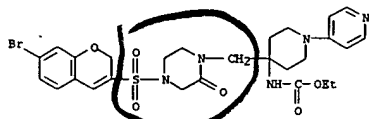
● 2 HC1

PAGE 2-A

RN 426263-76-5 CAPLUS
 CN Carbanic acid, [4-[[[4-[(7-bromo-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinylmethyl]-1-(4-pyridinyl)-4-piperidinyl]-, ethyl ester (9CI) (CA INDEX NAME)

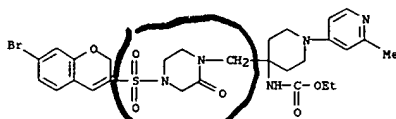


RN 426263-77-6 CAPLUS
CN Carbanic acid, [4-[[4-[[7-bromo-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl)methyl]-1-(4-pyridinyl)-4-piperidinyl]-, ethyl ester, hydrochloride (9CI) (CA INDEX NAME)



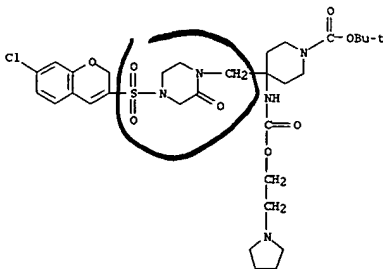
●x HCl

RN 426263-81-2 CAPLUS
CN Carbamic acid, {4-[[{4-[(7-bromo-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl)methyl]-1-(2-methyl-4-pyridinyl)-4-piperidinyl]-, ethyl ester (9C1) (CA INDEX NAME)

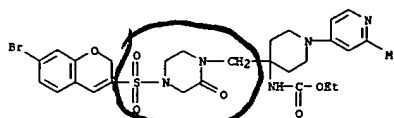


RN 426263-82-3 CAPLUS
CN Carbanic acid, [4-[[4-[(7-bromo-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(2-methyl-4-pyridinyl)-4-piperidinyl]-, ethyl ester, hydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
CN 1-Piperidinecarboxylic acid, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-4-[[[(2-pyrroolidinyl)ethoxy]carbonyl]amino]-, 1,1-dimethylethyl ester (SCI) (CA INDEX NAME)

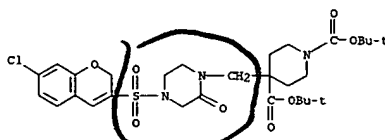


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

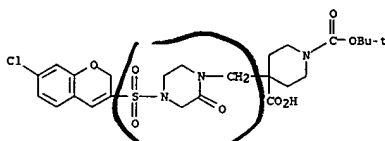


●x HCl

| | |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IT | 426263-94-7P 426263-95-7P 426264-11-1P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of carbamate derivs. as inhibitors of activated blood coagulation factor X) |
| RN | 426263-94-7 CARLUS |
| CN | 1,4- β -dimethylcarboxylic acid, 4-[[4-({7-chloro-2H-1-benzopyran-3- yl)sulfonyl]-2-phenylperazinyl)methyl]-, bis(1,1-dimethylethyl) ester [9CI] [CA, INDEX NAME] |



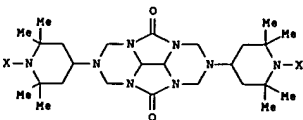
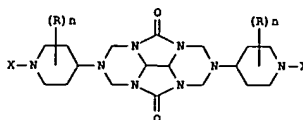
RN 426263-95-8 CAPLUS
CN 1,4-Piperidinedicarboxylic acid, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl)methyl]-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 426264-11-1 CAPLUS

L.O. ANSWER 7 OF 37 CAPLUS COPYRIGHT 2003 ACS ON STN
 APPLICATION NUMBER: 2002:185123 CAPLUS
 DOCUMENT NUMBER: 136:232309
 TITLE: Preparation and pharmaceutical compositions of soluble
 compounds for the inhibition of multidrug resistance
 INVENTOR(S): Seprodi, Janos; Sarkadi, Balazs; Hegedus, Tamas; Keri,
 Gyorgy; Orfi, Laszlo; Idei, Miklos; Holl6sy, Ferenc;
 Teplan, Istvan; Okada, Yoshio
 PATENT ASSIGNEE(S): Solve Biotechnology Inc., Rung.
 SOURCE: PCT Int. Appl., 22 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|------------|
| WO 20020527 | A1 | 20020314 | WO 2001-HU90 | 20010907 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, EE, DE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, JP, KZ, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MG, MK, MN, MX, MY, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GN, KR, LS, MW, NZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BU, CF, CG, CI, CH, CA, GN, GQ, GW, ML, HR, NE, SN, TD, TG | | | |
| AU 2001086131 | A5 | 20020322 | AU 2001-86131 | 20010907 |
| PRIORITY APPL. INFO.: | | | HU 2000-3654 | A 20000908 |
| | | | WO 2001-HU90 | W 20010907 |
| OTHER SOURCE(S): | MARPAT 136:232309 | | | |
| GI | | | | |

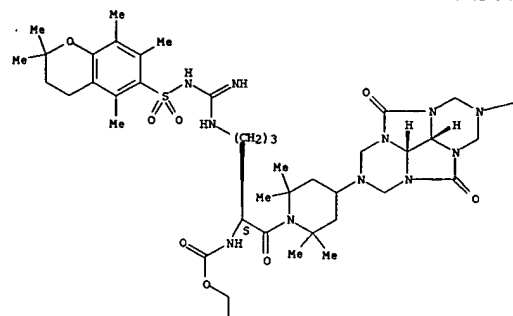


AB Piperidyl substituted hexahydro-1H,4H,5H,8H-2,3a,4a,6,7a,8a-hexazacyclohexa[de]fluorene-4,8-diones, such as I [R = H, alkyl, alkoxy; X = acyl, acyl from a protected amino acid; n = 0-8], were prepared for the inhibition of resistance developed against certain therapeutic agents. Thus, II [X = COCH(NH-Fmoc)CH₂CO₂Me₃] was prepared by reacting

L15 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 N-(9-fluorenylmethoxycarbonyl)aspartic acid 4-tert-Bu ester with II (X = H) using dicyclohexylcarbodiimide in DMF. The prepd. heterocycles were screened for their ability to reduce the activity of multidrug resistance proteins, MDR1, MRP1 and MRP2, by measuring ATPase activity of the multidrug transporter proteins or by measuring the level of a fluorescent indicator extruded by the transporter proteins.
 IT 403508-09-8P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. and pharmaceutical compns. of sol. compds. for the inhibition of multidrug resistance)
 RN 403508-09-8 CAPLUS
 CN Carbamic acid, [(cis-dihydro-4,8-dioxo-1H,4H,5H,8H-2,3a,4a,6,7a,8a-hexaazacyclopenta[def]fluorene-2,6(3H,7H)-diyl)bis[(2,2,6,6-tetramethyl-4,1-piperidinediyl)][(1S)-1-[3-[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]amino]propyl]-2-oxo-2,1-ethanediy]]bis-, bis(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)

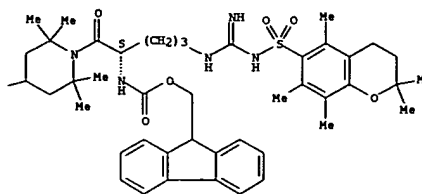
Absolute stereochemistry.

PAGE 1-A

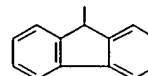


L15 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-B



PAGE 2-A



REFERENCE COUNT:

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THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

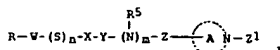
ANSWER 8 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 2002:72049 CAPLUS
 DOCUMENT NUMBER: 136:134784
 TITLE: Preparation of hydrocarbyl sulfone derivatives as inhibitors of activated blood coagulation factor X and process for their production
 INVENTOR(S): Kubo, Keiji; Miyawaki, Toshio; Kawamura, Masaki
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 252 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2002006234 | A1 | 20020124 | WO 2001-JP6148 | 20010717 |
| V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, EG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TG, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, SF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2001069531 | A5 | 20020130 | AU 2001-69531 | 20010717 |
| JP 2002201178 | A2 | 20020716 | JP 2001-216830 | 20010717 |
| EP 1302462 | A1 | 20030416 | EP 2001-948032 | 20010717 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |

PRIORITY APPLN. INFO.: JP 2000-221065 A 20000717
 WO 2001-JP6148 W 20010717

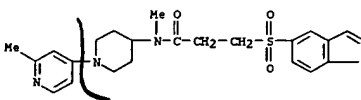
OTHER SOURCE(S): MARPAT 136:134784

G1

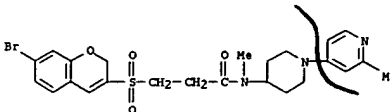


AB Compds. represented by the general formula (I) or salts thereof [wherein R = (un)substituted cyclic hydrocarbyl or heterocyclyl; W = a bond, (un)substituted divalent hydrocarbon chain; X = (un)substituted divalent hydrocarbon group; Y, Z = NR6, CO, SO, SO2, CH2, NR6CO, COCH2, a bond; ring A = (un)substituted N-contg. heterocyclyl; R5, R6 = H, (un)substituted hydrocarbyl, (un)substituted alkoxy, optionally esterified or amidated carboxyl, (un)substituted acyl; or R5 is linked to the substituent of X or that of the ring A to form a ring; Z1 = (un)substituted imidoyl or N-contg. heterocyclyl; n = 0,1,2; m = 0,1] or salts thereof, which inhibit activated blood coagulation factor X (no data), are prepd. These compds. are useful as anticoagulants for the treatment or prevention of myocardial infarction, cerebral thrombosis, deep venous thrombosis, pulmonary thromboembolism, or thromboembolism during or after surgery. Thus, a soln. of 3-[(6-chloro-2-naphthyl)sulfonyl]propanoic acid [prepn. given], 4-methylamino-1-(2-methyl-

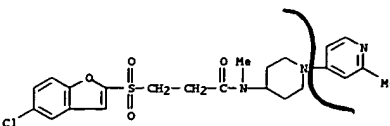
L15 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 4-pyridyl)piperidine (prepn. given), DMTHM in THF was stirred at room temp. for 16 h to give 384 3-[(6-chloro-2-naphthyl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]propanamide (II). A capsule and tablet formulation contg. II were prepd.
 IT 392329-04-3P, 3-[(5-Benzofuranyl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]propanamide 392329-34-9P, 3-[(7-Bromo-2H-chromen-3-yl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]propanamide 392329-96-3P, 3-[(5-Chloro-2-benzofuranyl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]propanamide
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of hydrocarbyl sulfone derivs. as inhibitors of activated blood coagulation factor X and anticoagulants for therapeutic agents)
 RN 392329-04-3 CAPLUS
 CN Propanamide, 3-[(5-benzofuranyl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)



RN 392329-34-9 CAPLUS
 CN Propanamide, 3-[(7-bromo-2H-1-benzopyran-3-yl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)



RN 392329-96-3 CAPLUS
 CN Propanamide, 3-[(5-chloro-2-benzofuranyl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

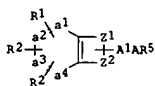
19

THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

09/980,451

ANSWER 9 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 APPLICATION NUMBER: 2001:935609 CAPLUS
 DOCUMENT NUMBER: 136:69813
 TITLE: Preparation of dioxinopyridines and related compounds for treating impaired fundic relaxation.
 INVENTOR(S): van Emelen, Kristof; Leopold de Bruyn, Marcel Frans; Alcazar-Vaca, Manuel Jesus; Andres-Gil, Jose Ignacio; Fernandez-Gadea, Francisco Javier; Matesanz-Ballesteros, Maria Encarnacion; Bartolome-Nebreda, Jose Manuel
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.
 SOURCE: PCT Int. Appl., 55 pp.
 CODEN: PIXXK2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|------------|
| WO 2001098306 | A1 | 20011227 | WO 2001-EP6749 | 20010613 |
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| EP 1296987 | A1 | 20030402 | EP 2001-962742 | 20010613 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| BR 2001011859 | A | 20030513 | BR 2001-11859 | 20010613 |
| BG 107313 | A | 20030630 | BG 2002-107313 | 20021125 |
| NO 2002006219 | A | 20030217 | NO 2002-6219 | 20021223 |
| PRIORITY APPLN. INFO.: | | | EP 2000-202180 | A 20000622 |
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| OTHER SOURCE(S): | | MARPAT 136:69813 | | |
| GI | | | | |

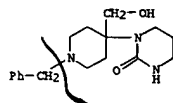


AB Title compds. [I; a1:a2a3:a4 = bivalent radical wherein 1-2 of a1-a4 = N, the remaining a1-a4 = CH; Z1:Z2 = specified bivalent radical; A = bivalent radical of formula N(R5)A2, 5, 6, or 7-membered satd. heterocycle contg.

ANSWER 10 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 APPLICATION NUMBER: 2001:453040 CAPLUS
 DOCUMENT NUMBER: 135:61343
 TITLE: Preparation of 1-(piperidin-4-yl)-1,4-dihydro-2H-3,1-benzoxazin-2-ones as purinoceptor P2X7 receptor antagonists for use in the treatment of inflammatory, immune, or cardiovascular diseases
 INVENTOR(S): Baxter, Andrew; Kindon, Nicholas; Pairaudau, Garry; Roberts, Bryan; Thom, Stephen
 PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
 SOURCE: PCT Int. Appl., 127 pp.
 CODEN: PIXXK2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

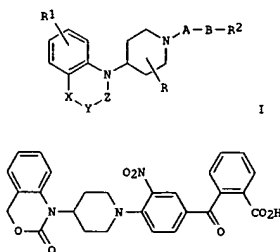
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|------------|
| WO 2001044213 | A1 | 20010621 | WO 2000-SE2504 | 20001212 |
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| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| BR 2000016396 | A | 20020820 | BR 2000-16396 | 20001212 |
| EP 1242396 | A1 | 20020925 | EP 2000-986154 | 20001212 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003516978 | T2 | 20030520 | JP 2001-544703 | 20001212 |
| US 2003040513 | A1 | 20030227 | US 2002-149760 | 20020613 |
| NO 2002002857 | A | 20020801 | NO 2002-2857 | 20020614 |
| PRIORITY APPLN. INFO.: | | | SE 1999-4652 | A 19991217 |
| | | | WO 2000-SE2504 | W 20001212 |
| OTHER SOURCE(S): | | MARPAT 135:61343 | | |
| GI | | | | |

L15 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 1-2 N atoms; R1, R2, R3 = H, alkyl, alkenyl, alkoxy, OH, halo cyano, amino, etc.; A1, A2 = {substituted} C1-6 alkanediyl, were prepd. Thus, 2,3-dihydro-1,4-dioxino[2,3-b]pyridine-3-methanol mesylate ester (prepn. given), 1-(3-aminopropyl)tetrahydro-2(1H)-pyrimidinone, and CaO were stirred at 100.degrees. overnight to give 1-[3-[(2,3-dihydro-1,4-dioxino[2,3-b]pyridin-3-yl)methyl]amino]propyl]tetrahydro-2(1H)pyrimidinone. This at 0.63 mg/kg s.c. in dogs gave a max. increase in gastric vol. of 156 mL.
 IT 312928-40-8P, Tetrahydro-1-[4-(hydroxymethyl)-1-(phenylmethyl)-4-piperidinyl]-2(1H)-pyrimidinone
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. of dioxinopyridines and related compds. for treating impaired fundic relaxation)
 RN 312928-40-8 CAPLUS
 CN 2(1H)-Pyrimidinone, tetrahydro-1-[4-(hydroxymethyl)-1-(phenylmethyl)-4-piperidinyl]- (9C1) (CA INDEX NAME)



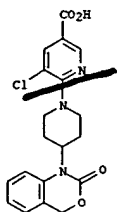
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



AB Title compds. (I) [wherein A = (un)substituted Ph or 5- or 6-membered heterocycle; B = CO, NH, or SO2; X = CO, CH(Me), O, or (CH2)p; p = 0-1; Y = O, CH2, NH, or S; Z = CO or SO2; R = H or alkyl; R1 = H or halo; R2 = (un)substituted Ph; or a pharmaceutically acceptable salt or solvate] were prepd. purinoceptor P2X7 receptor antagonists. For example, 1-piperidin-1-yl-1,4-dihydro-2H-3,1-benzoxazin-2-one.hcl.HCl, 2-(4-chloro-3-nitrobenzyl)benzoic acid, and TEA in DMF were stirred at room temp. for 72 h to give II. Each of the example compds. demonstrated antagonist activity at the P2X7 receptor with pIC50 values > 5.00. Thus, I are particularly useful for effecting immunosuppression or for treating rheumatoid arthritis (no data).
 IT 345583-33-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; prepn. of piperidinylbenzoxazinones P2X7 receptor antagonists via coupling reactions for use in treatment of inflammatory, immune, or cardiovascular diseases)
 RN 345583-33-7 CAPLUS
 CN 3-Pyridinecarboxylic acid, 5-chloro-6-[4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]- (9C1) (CA INDEX NAME)

L15 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

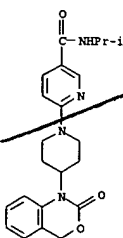


IT 345582-92-5P 345582-93-6P 345583-04-2P
 345583-05-3P 345583-09-7P 345583-32-6P
 345583-34-8P 345583-35-9P 345583-36-0P
 345583-37-1P 345583-38-2P 345583-39-3P
 345583-40-6P 345583-64-4P 345583-65-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of piperidinylbenzoxazinones PZK7 receptor antagonists via coupling reactions for use in treatment of inflammatory, immune, or cardiovascular diseases)

RN 345582-92-5 CAPLUS

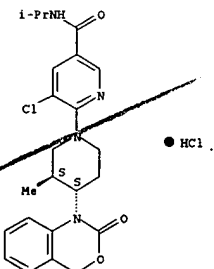
CN 3-Pyridinecarboxamide, N-(1-methylethyl)-6-[(4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl)]- (9CI) (CA INDEX NAME)



RN 345582-93-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-chloro-N-(1-methylethyl)-6-[(4-(2-oxo-2H-3,1-

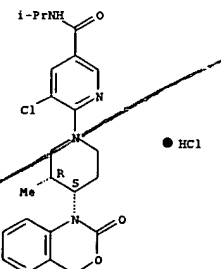
L15 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 345583-09-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-chloro-N-(1-methylethyl)-6-[(3R,4S)-3-methyl-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

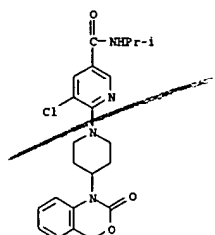


RN 345583-32-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[(1R)-1-(aminocarbonyl)-2-methylpropyl]-5-chloro-6-[(4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl)]- (9CI) (CA INDEX NAME)

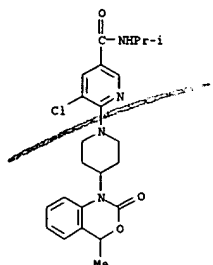
Absolute stereochemistry.

L15 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 345583-04-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-chloro-N-(1-methylethyl)-6-[(4-(4-methyl-2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl)]- (9CI) (CA INDEX NAME)

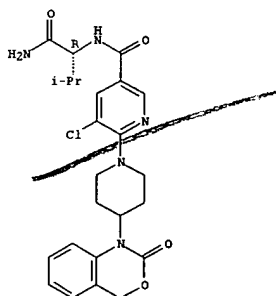


RN 345583-05-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-chloro-N-(1-methylethyl)-6-[(3R,4R)-3-methyl-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

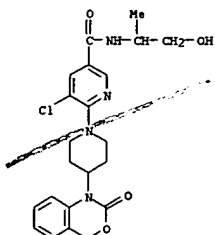
Relative stereochemistry.

L15 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 345583-34-8 CAPLUS

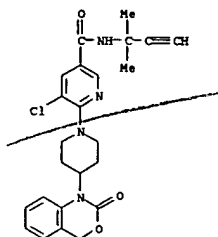
CN 3-Pyridinecarboxamide, 5-chloro-N-(2-hydroxy-1-methylethyl)-6-[(4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl)]- (9CI) (CA INDEX NAME)



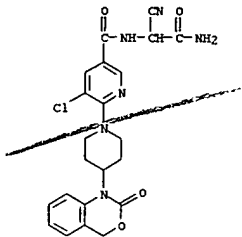
RN 345583-35-9 CAPLUS

CN 3-Pyridinecarboxamide, 5-chloro-N-(1,1-dimethyl-2-propynyl)-6-[(4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl)]- (9CI) (CA INDEX NAME)

L15 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 345583-36-0 CAPLUS
 CN 3-Pyridinecarboxamide, N-[(2-amino-1-cyano-2-oxoethyl)-5-chloro-6-[(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]- (9CI) (CA INDEX NAME)

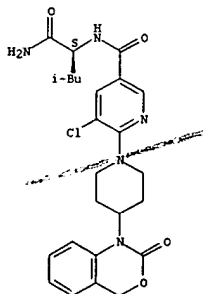


RN 345583-37-1 CAPLUS
 CN 3-Pyridinecarboxamide, N-[(1R)-1-(aminocarbonyl)-3-methylbutyl]-5-chloro-6-[(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]- (9CI) (CA INDEX NAME)

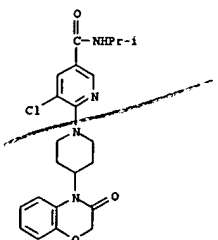
Absolute stereochemistry.

L15 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 CN 3-Pyridinecarboxamide, N-[(1S)-1-(aminocarbonyl)-3-methylbutyl]-5-chloro-6-[(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



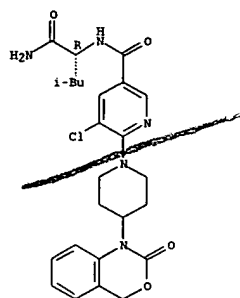
RN 345583-40-6 CAPLUS
 CN 3-Pyridinecarboxamide, 5-chloro-N-[(1-methylethyl)-6-[(3R,4S)-3-methyl-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]-, rel- (9CI) (CA INDEX NAME)



RN 345583-64-4 CAPLUS
 CN 3-Pyridinecarboxamide, 5-chloro-N-[(1-methylethyl)-6-[(3R,4S)-3-methyl-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]-, rel- (9CI) (CA INDEX NAME)

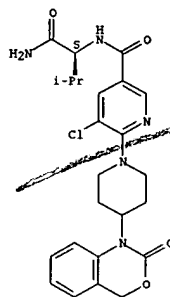
Relative stereochemistry.

L15 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



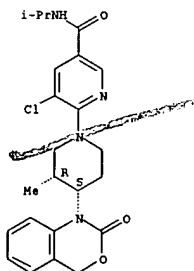
RN 345583-38-2 CAPLUS
 CN 3-Pyridinecarboxamide, N-[(1S)-1-(aminocarbonyl)-2-methylpropyl]-5-chloro-6-[(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



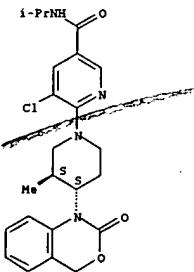
RN 345583-39-3 CAPLUS

L15 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 345583-65-5 CAPLUS
 CN 3-Pyridinecarboxamide, 5-chloro-N-[(1-methylethyl)-6-[(3R,4R)-3-methyl-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT:

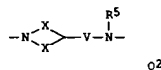
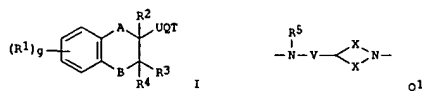
2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

09/980,451

LI ANSWER 11 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 2001:31495 CAPLUS
 DOCUMENT NUMBER: 134:95527
 TITLE: Tetrahydropyridyl, benzopyranyl, and benzodioxanyl derivatives for reducing cravings to food or an addictive substance
 INVENTOR(S): Luscombe, Graham Paul; Needham, Patricia Lesley
 PATENT ASSIGNER(S): Knoll Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 29 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|------------|
| WO 2001002391 | A2 | 20010111 | WO 2000-EP5735 | 20000621 |
| WO 2001002391 | A3 | 20010712 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1198234 | A2 | 20020424 | EP 2000-943852 | 20000621 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| JP 2003503491 | T2 | 20030128 | JP 2001-507828 | 20000621 |
| PRIORITY APPL. INFO.: | | | GB 1999-15616 | A 19990705 |
| | | | WO 2000-EP5735 | W 20000621 |
| OTHER SOURCE(S): MARPAT 134:95527 | | | | |
| GI | | | | |



LI ANSWER 12 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 2000:881147 CAPLUS
 DOCUMENT NUMBER: 134:42137
 TITLE: Preparation of pyrrolidinyl, piperidinyl or homopiperidinyl substituted benzodioxan, benzofuran or benzopyran derivatives for treating conditions which are related to impaired fundic relaxation
 INVENTOR(S): De Bruyn, Marcel Frans Leopold; Van Emelen, Kristof; Wigerinck, Pieter Tom Bert Paul; Verschueren, Wim Gaston
 PATENT ASSIGNER(S): Janssen Pharmaceutica N.V., Belg.
 SOURCE: PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

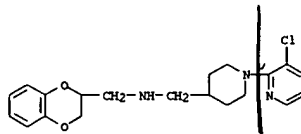
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|-----------------|------------|
| WO 2000075137 | A1 | 200001214 | WO 2000-EP4747 | 20000523 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| BR 2000011247 | A | 20020305 | BR 2000-11247 | 20000523 |
| EP 1187831 | A1 | 20020320 | EP 2000-927243 | 20000523 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2003501428 | T2 | 20030114 | JP 2001-502420 | 20000523 |
| KE 200100640 | A | 20030217 | KE 2001-640 | 20000523 |
| NZ 515478 | A | 20030328 | NZ 2000-515478 | 20000523 |
| BG 106157 | A | 20020628 | BG 2001-106157 | 20011128 |
| NO 2001005865 | A | 20020201 | NO 2001-5865 | 20011130 |
| PRIORITY APPL. INFO.: | | | EP 1999-201746 | A 19990602 |
| | | | WO 2000-EP4747 | W 20000523 |
| OTHER SOURCE(S): MARPAT 134:42137 | | | | |
| GI | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

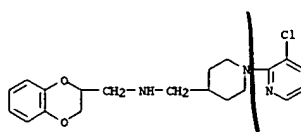
AB The title compds. [I: Alk = (un)substituted alkanediyl, alkylcarbonyl, carbonylalkyl, etc.; Z1Z2 = OCH₂CH₂, OCH₂CH₂CH₂, etc.; R1-R3 = H, alkyl, OH, etc.; or when R1 and R2 are on adjacent carbon atoms, R1 and R2 taken together may form (CH₂)₃, OCH₂CH₂, (CH₂)₄, etc.; R4 = H, alkyl, hydroxyalkyl, etc.; the bivalent radical A = substituted piperidinyl, (un)substituted pyrrolidinyl, homopiperidinyl, etc.; R5 = II-IV, etc. (wherein X = O, S, NR₉, CHN₂; Y = O, S; R7 = H, alkyl, cycloalkyl, etc.; R8 = alkyl, cycloalkyl, Ph, phenylmethyl; R9 = CN, alkyl, cycloalkyl, etc.; R10 = H, alkyl; Q = (CH₂)₂, (CH₂)₃, CH₂CH₂, etc.) and their pharmaceutically acceptable acid addn. salts, useful as a medicine, in particular for treating conditions which are related to impaired fundic relaxation, were prepd. E.g., a multi-step synthesis of the pyrimidinone

L15 ANSWER 11 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

AB Compds. 1 [A, B = CH₂, O; g = 0-4; R1 = halo, (substituted) alkyl, (substituted) alkoxy, etc.; R2 = H, alkyl, alkoxy; R3, R4 = H, alkyl; U = (alkyl-substituted) alkylene; Q = N(R5)V'NH, Q1, Q2; V = bond, (alkyl-substituted) alkylene; V' = (alkyl-substituted) alkylene; X = bond, alkylene; X' = alkylene; provided that total no. of C atoms in X and X' atoms to 3 or 4; R5 = H, alkyl; T = (substituted) arom. group which optionally contains .gtoreq.1 N atoms, provided that T is not 2-pyrimidinyl when A is O], and pharmaceutically acceptable salts thereof, have utility in reducing cravings to food or an addictive substance.
 IT 170352-99-5 170352-99-5D, enantiomers
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (tetrahydropyridyl, benzopyranyl, and benzodioxanyl derivs. for reducing cravings to food or addictive substance)
 RN 170352-99-5 CAPLUS
 CN 4-Piperidineethanamine, 1-(3-chloro-2-pyridinyl)-N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)



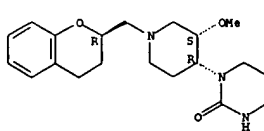
RN 170352-99-5 CAPLUS
 CN 4-Piperidineethanamine, 1-(3-chloro-2-pyridinyl)-N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)



L15 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

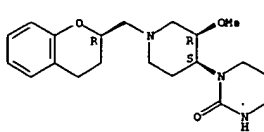
(R)-V which showed the mean maximal change of 178 ml in vol. on relaxation of the fundus, during the 1 h observation period after i.d. administration at 0.63 mg/kg, was given.
 IT 312927-64-3P 312927-66-5P 312927-68-7P
 312927-70-1P 312927-71-2P 312927-73-4P
 312927-78-9P 312927-80-3P 312927-81-4P
 312927-83-6P 312927-85-8P 312927-86-9P
 312927-88-1P 312927-90-5P 312927-92-7P
 312927-93-8P 312927-94-9P 312927-97-2P
 312928-00-0P 312928-03-3P 312928-05-5P
 312928-07-7P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 [prepn. of pyrrolidinyl, piperidinyl or homopiperidinyl substituted benzodioxan, benzofuran or benzopyran derivs. for treating conditions which are related to impaired fundic relaxation]
 RN 312927-64-3 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3S,4R)-1-[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-3-methoxy-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 312927-66-5 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3R,4S)-1-[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-3-methoxy-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

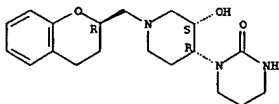
Absolute stereochemistry.



RN 312927-68-7 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3S,4R)-1-[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-3-hydroxy-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

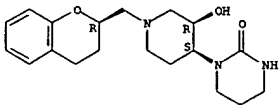
Absolute stereochemistry.

L15 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



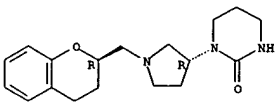
RN 312927-70-1 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-3-hydroxy-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



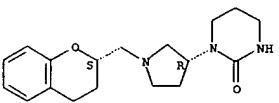
RN 312927-71-2 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-3-pyrrolidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

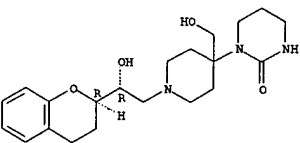


RN 312927-73-4 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-3-pyrrolidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

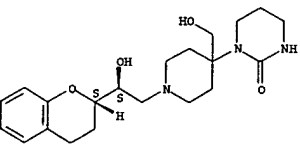


L15 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



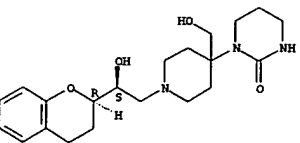
RN 312927-85-8 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2R)-2-[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl]-2-hydroxyethyl]-4-(hydroxymethyl)-4-piperidinyl]tetrahydro-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 312927-86-9 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2S)-2-[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl]-2-hydroxyethyl]-4-(hydroxymethyl)-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



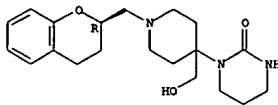
RN 312927-88-1 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2R)-2-[(2S)-3,4-dihydro-2H-1-benzopyran-2-yl]-2-hydroxyethyl]-4-(hydroxymethyl)-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L15 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

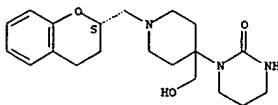
RN 312927-78-9 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-4-(hydroxymethyl)-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



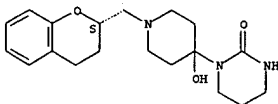
RN 312927-80-3 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2S)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-4-(hydroxymethyl)-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 312927-81-4 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2S)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-4-hydroxy-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

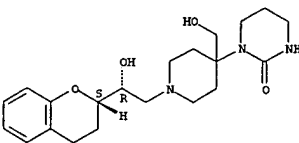
Absolute stereochemistry.



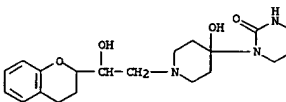
RN 312927-83-6 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2R)-2-[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl]-2-hydroxyethyl]-4-(hydroxymethyl)-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L15 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

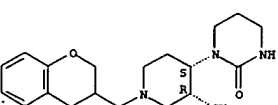


RN 312927-90-5 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(2R)-2-[(3,4-dihydro-2H-1-benzopyran-2-yl)-2-hydroxyethyl]-4-hydroxy-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)



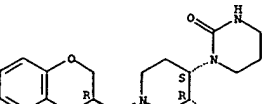
RN 312927-92-7 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[(3R,4S)-1-[(3,4-dihydro-2H-1-benzopyran-3-yl)methyl]-3-hydroxy-4-piperidinyl]tetrahydro-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 312927-93-8 CAPLUS
CN 2(1H)-Pyrimidinone, 1-[1-[(3R,4S)-1-[(3R)-3,4-dihydro-2H-1-benzopyran-3-yl)methyl]-3-methoxy-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

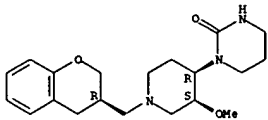
Absolute stereochemistry.



L15 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

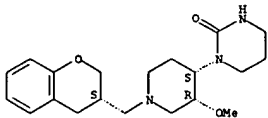
RN 312927-94-9 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3S,4R)-1-[[[(3R)-3,4-dihydro-2H-1-benzopyran-3-yl)methyl]-3-methoxy-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



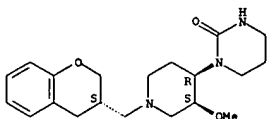
RN 312927-97-2 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3R,4S)-1-[[[(3S)-3,4-dihydro-2H-1-benzopyran-3-yl)methyl]-3-methoxy-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 312928-00-0 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3S,4R)-1-[[[(3S)-3,4-dihydro-2H-1-benzopyran-3-yl)methyl]-3-methoxy-4-piperidinyl]tetrahydro- (9CI) (CA INDEX NAME)

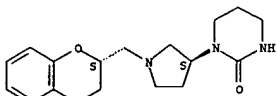
Absolute stereochemistry.



RN 312928-03-3 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3S)-1-[[[(3R)-3,4-dihydro-2H-1-benzopyran-3-yl)methyl]-3-pyrrolidinyl]tetrahydro- (9CI) (CA INDEX NAME)

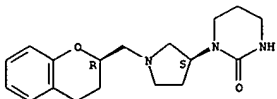
Absolute stereochemistry.

L15 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

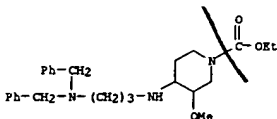


RN 312927-77-8 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3S)-1-[[[(2R)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-3-pyrrolidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

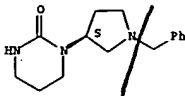


IT 312928-10-2P 312928-28-2P 312928-40-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. of pyrrolidinyl, piperidinyl or homopiperidinyl substituted benzodioxan, benzofuran or benzopyran derivs. for treating conditions which are related to impaired fundic relaxation)
 RN 312928-10-2 CAPLUS
 CN 1-Piperidinecarboxylic acid, 4-[[[3-(bis(phenylmethyl)amino)propyl]amino]-3-methoxy-, ethyl ester (9CI) (CA INDEX NAME)

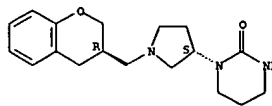


RN 312928-28-2 CAPLUS
 CN 2(1H)-Pyrimidinone, tetrahydro-1-[(3S)-1-(phenylmethyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

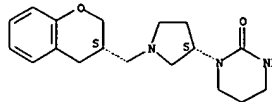


L15 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



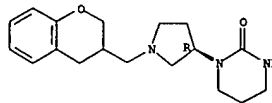
RN 312928-05-5 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3S)-1-[[[(3S)-3,4-dihydro-2H-1-benzopyran-3-yl)methyl]-3-pyrrolidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 312928-07-7 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3R)-1-[(3,4-dihydro-2H-1-benzopyran-3-yl)methyl]-3-pyrrolidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



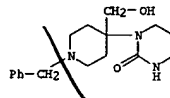
IT 312927-75-6 312927-77-8
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (prepn. of pyrrolidinyl, piperidinyl or homopiperidinyl substituted benzodioxan, benzofuran or benzopyran derivs. for treating conditions which are related to impaired fundic relaxation)

RN 312927-75-6 CAPLUS
 CN 2(1H)-Pyrimidinone, 1-[(3S)-1-[(2S)-3,4-dihydro-2H-1-benzopyran-2-yl)methyl]-3-pyrrolidinyl]tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L15 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 312928-40-8 CAPLUS
 CN 2(1H)-Pyrimidinone, tetrahydro-1-[4-(hydroxymethyl)-1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

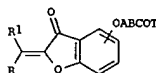


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

09/980,451

ANSWER 13 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
SESSION NUMBER: 2000:553249 CAPLUS
DOCUMENT NUMBER: 133:150455
TITLE: Preparation of alkoxyalkylidenecoumarones as antitumor and antimetastatic agents.
INVENTOR(S): Friebe, Walter-gunar; Koenig, Bernhard; Krell, Hans-Wilii; Woelle, Sabine
PATENT ASSIGNER(S): Roche Diagnostics G.m.b.H., Germany
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXKDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------------------------------------------------------------|------|-------------------|-----------------|------------|
| EP 1026165 | A1 | 20000809 | EP 2000-101407 | 20000125 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| AU 736869 | B2 | 20010802 | AU 2000-13526 | 20000124 |
| CA 2297225 | AA | 20000730 | CA 2000-2297225 | 20000126 |
| ZA 2000000392 | A | 20010730 | ZA 2000-392 | 20000128 |
| CN 1266850 | A | 20000920 | CN 2000-101824 | 20000129 |
| JP 2000226381 | A2 | 20000815 | JP 2000-27252 | 20000131 |
| JP 3165421 | B2 | 20010514 | | |
| BR 2000000226 | A | 20010821 | BR 2000-226 | 20000131 |
| US 6307051 | B1 | 20011023 | US 2000-497220 | 20000131 |
| PRIORITY APPLN. INFO.: | | | EP 1999-101956 | A 19990130 |
| OTHER SOURCE(S): | | MARPAT 133:150455 | | |
| GI | | | | |

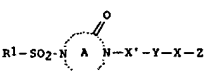


AB Title compds. [1; R, R1 = H, alkyl, styryl, cycloalkyl; RR1C = cycloalkyl; A = CH2C.tplbond.CCH2, CH2C6H4CH2, etc.; B = 4-aminopiperidinyl, piperazinyl, 4-aminomethylpiperidinyl, 4-(2-aminomethyl)piperidinyl; T = CH2.tplbond.CCH, C.tplbond.CH, (CH2)2R3, CH(CHR3, CH2NHCOR3, (CH2)2pOR3, CH(NH2)CH2R3; p = 0-4; R3 = (substituted) Ph, naphthyl, biphenyl, (benzocondensed) heterocyclyl, were prepd. Thus, 4-(3-chloromethylphenylmethoxy)-2-isopropylidenecoumaran-3-one reacted with 4-(3,4-dichlorobenzamido)piperidine to give 4-[3-[4-(3,4-dichlorobenzamido)piperidinomethyl]phenylmethoxy]-2-isopropylidenecoumaran-3-one. This inhibited urokinase-type plasminogen activator (uPA) binding to the uPAR receptor with IC50 = 1.41 .mu.M.

IT R1: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

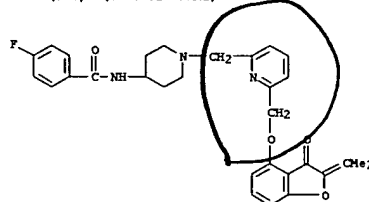
ANSWER 14 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
SESSION NUMBER: 1999:511143 CAPLUS
DOCUMENT NUMBER: 131:170361
TITLE: Preparation of sulfonamides as inhibitors of activated blood coagulation factor X
INVENTOR(S): Tawada, Hiroyuki; Itoh, Fumio; Banno, Hiroshi; Terashita, Zenichi
PATENT ASSIGNER(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 187 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------------|-----------------|-------------|
| WO 9940075 | A1 | 19990812 | WO 1999-JP470 | 19990204 |
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| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2317017 | AA | 19990812 | CA 1999-2317017 | 19990204 |
| AU 9922988 | A1 | 19990823 | AU 1999-22988 | 19990204 |
| JP 2000204081 | A2 | 20000725 | JP 1999-27053 | 19990204 |
| EP 1054005 | A1 | 20001122 | EP 1999-902829 | 19990204 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| US 6403595 | B1 | 20020611 | US 2000-601660 | 20000803 |
| US 2002193382 | A1 | 20021219 | US 2002-128809 | 20020424 |
| PRIORITY APPLN. INFO.: | | | JP 1998-24833 | A 19980205 |
| | | | JP 1998-317205 | A 19981109 |
| | | | WO 1999-JP470 | W 19990204 |
| OTHER SOURCE(S): | | MARPAT 131:170361 | US 2000-601660 | A3 20000803 |
| GI | | | | |



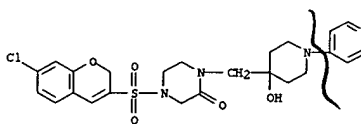
AB The title compds. [1; R1 represents a hydrocarbyl or heterocyclic group each optionally substituted; the ring A represents a divalent nitrogen-contg. heterocycle group optionally further substituted; X' represents optionally substituted alkylene; Y represents an optionally substituted divalent cyclic group; X represents a bond or optionally substituted alkylene; and Z represents optionally substituted amino, optionally substituted imido, or an optionally substituted nitrogen-contg. heterocyclic group] are prepd. Formulations contg. a compd. of this invention are given. In a test for inhibiting activity of

L15 ANSWER 13 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 (prepn. of alkoxyalkylidenecoumarones as antitumor and antimetastatic agents)
RN 287200-37-7 CAPLUS
CN Benzamide, N-[1-[[[6-[[[2,3-dihydro-2-(1-methylethylidene)-3-oxo-4-benzofuranyl]oxy]methyl]-2-pyridinyl]methyl]-4-piperidinyl]-4-fluoro- (9CI) (CA INDEX NAME)

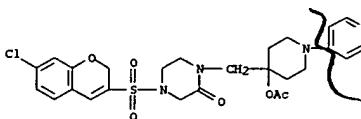


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

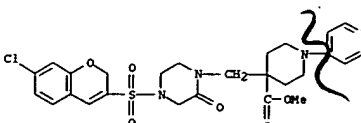
L15 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 title compds. against activated blood coagulation factor X, 1-(4-amidinobenzyl)-4-(6-chloronaphthalene-2-sulfonyl)-2-piperazinone hydrochloride showed IC50 of 0.05 .mu.M.
IT 239071-52-4P 239071-55-7P 239071-63-7P 239071-90-0P 239071-91-1P 239071-92-7P 239071-93-3P 239072-55-0P 239072-56-1P 239072-57-2P 239072-60-7P 239072-61-8P
 R1: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of sulfonamides as inhibitors of activated blood coagulation factor X)
RN 239071-52-4 CAPLUS
CN Piperazinone, 1-[[[4-(acetyloxy)-1-(4-pyridinyl)-4-piperidinyl]methyl]-1-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-1-(4-hydroxy-1-(4-pyridinyl)-4-piperidinyl)methyl]- (9CI) (CA INDEX NAME)



RN 239071-55-7 CAPLUS
CN Piperazinone, 1-[[[4-(acetyloxy)-1-(4-pyridinyl)-4-piperidinyl]methyl]-1-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-1-(4-hydroxy-1-(4-pyridinyl)-4-piperidinyl)methyl]- (9CI) (CA INDEX NAME)

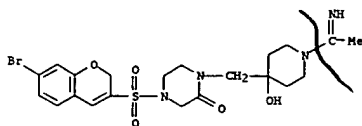


RN 239071-63-7 CAPLUS
CN 4-Piperidinedicarboxylic acid, 4-[[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-, methyl ester (9CI) (CA INDEX NAME)



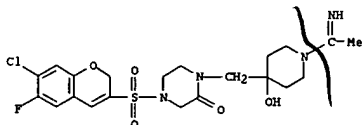
RN 239071-90-0 CAPLUS

L15 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 CN 4-Piperidinol, 4-[[4-[(7-bromo-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl)methyl]-1-(1-iminoethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

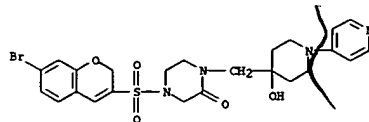
RN 239071-91-1 CAPLUS
 CN 4-Piperidinol, 4-[[4-[(7-chloro-6-fluoro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl)methyl]-1-(1-iminoethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

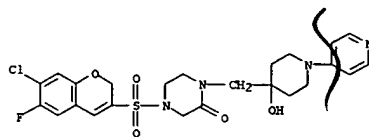
RN 239071-92-2 CAPLUS
 CN Piperazinone, 4-[[4-[(7-bromo-2H-1-benzopyran-3-yl)sulfonyl]-1-[(4-hydroxy-1-(4-pyridinyl)-4-piperidinyl)methyl]-1-(1-iminoethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



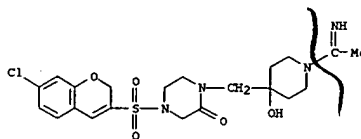
● HCl

RN 239071-93-3 CAPLUS
 CN Piperazinone, 4-[[4-[(7-chloro-6-fluoro-2H-1-benzopyran-3-yl)sulfonyl]-1-[(4-hydroxy-1-(4-pyridinyl)-4-piperidinyl)methyl]-1-(1-iminoethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

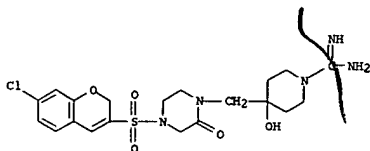
RN 239072-55-0 CAPLUS
 CN 4-Piperidinol, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl)methyl]-1-(1-iminoethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

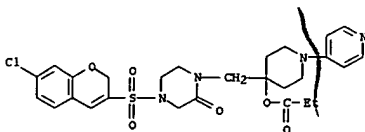
L15 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 239072-56-1 CAPLUS
 CN 1-Piperidinecarboximidamide, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl)methyl]-4-hydroxy-, monohydrochloride (9CI) (CA INDEX NAME)

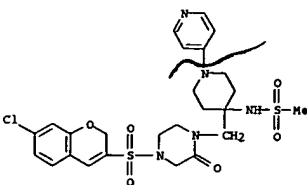


● HCl

RN 239072-57-2 CAPLUS
 CN Piperazinone, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-1-[(4-(1-oxopropoxy)-1-(4-pyridinyl)-4-piperidinyl)methyl]-1-(1-iminoethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

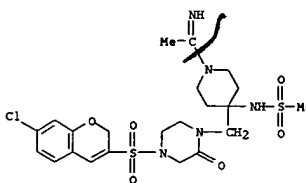


RN 239072-60-7 CAPLUS
 CN Methanesulfonamide, N-[4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl)methyl]-1-(4-pyridinyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)



RN 239072-61-8 CAPLUS

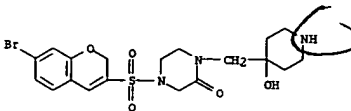
L15 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 CN 4-Piperidinamine, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl)methyl]-1-(1-iminoethyl)-N-(methylsulfonyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

IT 239074-36-5 239074-39-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of sulfonamides as inhibitors of activated blood coagulation factor X)

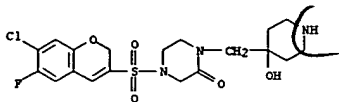
RN 239074-38-5 CAPLUS
 CN Piperazinone, 4-[(7-bromo-2H-1-benzopyran-3-yl)sulfonyl]-1-[(4-hydroxy-4-piperidinyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 239074-39-6 CAPLUS
 CN Piperazinone, 4-[(7-chloro-6-fluoro-2H-1-benzopyran-3-yl)sulfonyl]-1-[(4-hydroxy-4-piperidinyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



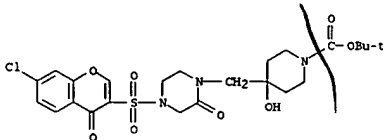
● HCl

IT 239073-08-6P 239073-09-7P 239073-10-8P
239073-19-9P 239073-20-2P 239073-28-0P
239074-01-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of sulfonamides as inhibitors of activated blood coagulation factor X)

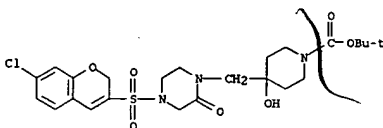
RN 239073-08-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(7-chloro-4-oxo-4H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-4-hydroxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



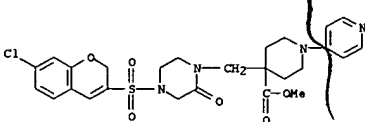
RN 239073-09-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-4-hydroxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 239073-18-8 CAPLUS

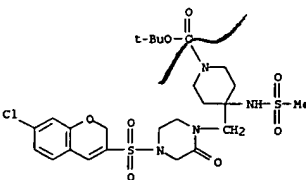
L15 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



● HCl

RN 239074-01-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-4-[(methoxysulfonyl)amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



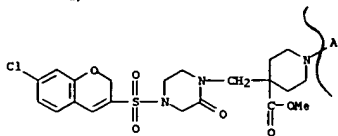
REFERENCE COUNT:

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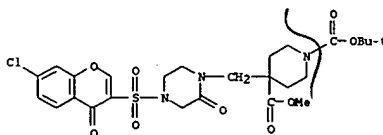
L15 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CN 4-Piperidinecarboxylic acid, 1-acetyl-4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)



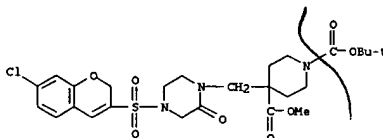
RN 239073-19-9 CAPLUS

CN 1,4-Piperidinedicarboxylic acid, 4-[[4-[(7-chloro-4-oxo-4H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-, 1-(1,1-dimethylethyl) 4-methyl ester (9CI) (CA INDEX NAME)



RN 239073-20-2 CAPLUS

CN 1,4-Piperidinedicarboxylic acid, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-, 1-(1,1-dimethylethyl) 4-methyl ester (9CI) (CA INDEX NAME)



RN 239073-28-0 CAPLUS

CN 4-Piperidinecarboxylic acid, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

RN 239073-28-0 CAPLUS

CN 4-Piperidinecarboxylic acid, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

DOCUMENT NUMBER:

1998:352628 CAPLUS

DOCUMENT NUMBER:

129:41136

TITLE:

Preparation of benzoxazinones as tocolytic oxytocin

INVENTOR(S):

Bell, Ian M.; Freidinger, Roger M.; Williams, Peter D.

PATENT ASSIGNER(S):

Merck and Co., Inc., USA

SOURCE:

U.S., 20 pp.

CODEN:

USXXAH

DOCUMENT TYPE:

Patent

LANGUAGE:

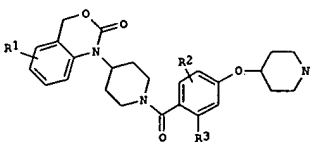
English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|------------------|----------|
| US 5756497 | A | 19980526 | US 1997-807307 | 19970227 |
| PRIORITY APPL. INFO.: | | | US 1997-807307 | 19970227 |
| OTHER SOURCE(S): | | | MARPAT 129:41136 | |



AB Title compds. [I; R1, R2 = H, halo; R3 = H, alkory; W = (substituted) 3-pyridylmethyl, 3-pyridylcarbonyl, tetrahydroquinolinyl, etc.], were prepd. Thus, 4-(N-tert-butoxycarbonyl-4-piperidinyl)-2-methoxybenzoic acid (prepn. given) and 1-(4-piperidinyl)-4(H)-3,1-benzoxazin-2(1H)-one hydrochloride (prepn. given) were stirred with HOBT and EDC in DMF to give 1-[[4-(4-piperidinyl)-2-methoxybenzoyl]piperidin-4-yl]-4(H)-1,3-benzoxazin-2(1H)-one. Representative 1 inhibited binding of [3H]oxytocin to uterine tissue with IC50 = 1-50 nM.

IT 191269-27-2P 198401-48-8P 198401-50-2P

198401-72-8P 198401-73-9P 198401-74-0P

208252-32-8P 208252-33-9P 208252-34-0P

208252-35-1P 208252-40-8P 208252-41-9P

208252-42-0P

RL: EAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USRS (Uses)

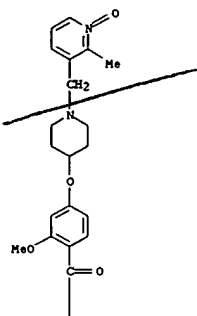
(prepn. of benzoxazinones as tocolytic oxytocin receptor antagonists)

RN 191269-27-2 CAPLUS

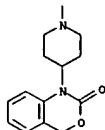
CN Piperidine, 1-[2-methoxy-4-[[1-[(2-methyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

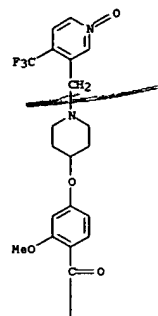


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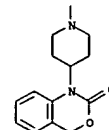
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

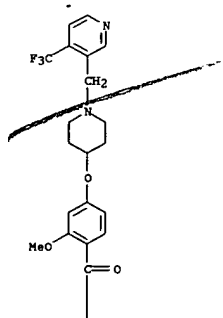


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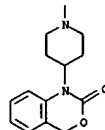
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

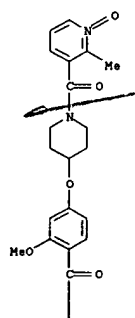


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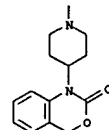
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

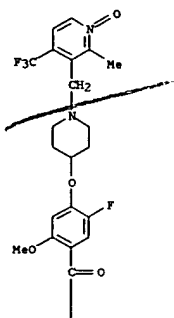


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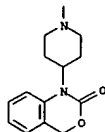
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



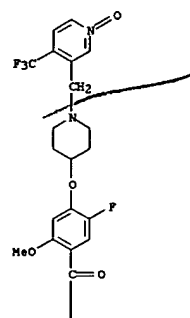
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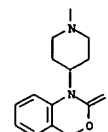
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



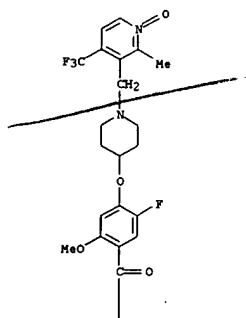
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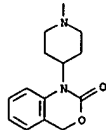
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



● HCl

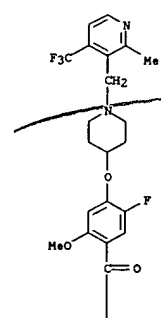
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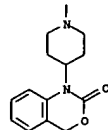
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



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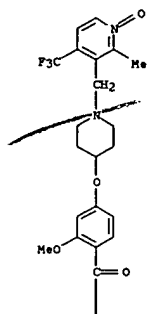
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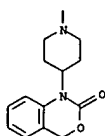
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
1(4H)-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



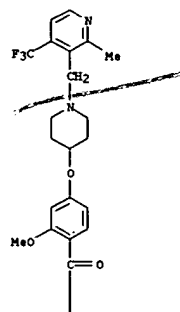
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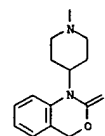
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
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PAGE 1-A



PAGE 2-A



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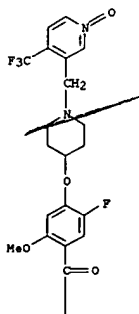
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

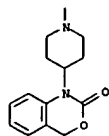


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PAGE 1-A



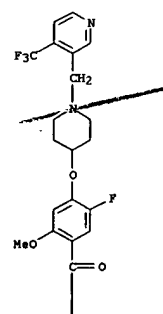
PAGE 2-A



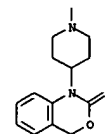
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PAGE 1-A



PAGE 2-A

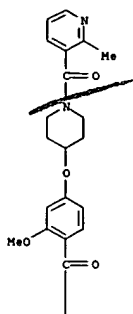


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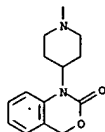
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L15 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



● HCl

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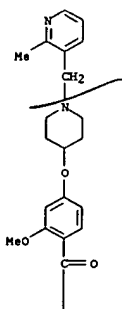
L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
the constrained ring system, whereas the latter showed improvement in plasma pharmacokinetics in some cases.

IT 162046-45-9P 181269-27-2P 198401-74-0P
208517-07-1P 208517-08-2P 208517-09-3P
208517-10-6P 208517-11-7P 208517-12-8P
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208517-37-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of pyridinylmethylpiperidinylbenzoylpiperidinylbenzoxazinone as oxytocin antagonists)

RN 162046-45-9 CAPLUS

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PAGE 1-A

L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

1998:298896 CAPLUS

129:67747

Development of Orally Active Oxytocin Antagonists:
Studies on 1-[(4-[(1-(2-Methyl-1-oxido-3-pyridinyl)methyl)-2-methoxybenzoyl]piperidin-4-yl)-1,4-dihydrobenz[d][1,3]oxazin-2-one (L-372,662) and Related Pyridines

AUTHOR(S): Bell, Ian M.; Erb, Jill M.; Freidinger, Roger M.; Gallicchio, Steven N.; Guare, James P.; Guidotti, Maribeth T.; Halpin, Rita A.; Hobbs, Doug W.; Homnick, Carl F.; Kuo, Michelle S.; Lio, Edward V.; Mathre, David J.; Michelson, Stuart R.; Pawluczky, Joseph M.; Pettibone, Douglas J.; Reiss, Duane R.; Vickers, Stanley; Williams, Peter D.; Woyden, Carla J.
CORPORATE SOURCE: Departments of Drug Metabolism Medicinal Chemistry Pharmacology and Process Research, Merck Research Laboratories, West Point, PA, 19486, USA
SOURCE: Journal of Medicinal Chemistry (1998), 41(12), 2146-2163

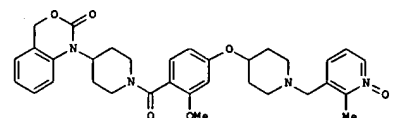
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PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

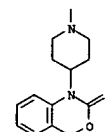
GI



AB The previously reported oxytocin antagonist L-371,257 has been modified at its acetylpyrrolidine terminus to incorporate various pyridine N-oxide groups. This modification has led to the identification of compds. with improved pharmacokinetics and excellent oral bioavailability. The pyridine N-oxide series is exemplified by L-372,662 (I), which possessed good potency in vitro ($K_i = 4.1$ nM, cloned human oxytocin receptor) and in vivo (i.v. $AD_{50} = 0.71$ mg/kg in the rat), excellent oral bioavailability (90% in the rat, 96% in the dog), good aq. soly. (>8.5 mg/mL at pH 5.2) which should facilitate formulation for i.v. administration, and excellent selectivity against the human arginine vasopressin receptors. Incorporation of a 5-fluoro substituent on the central benzoyl ring of this class of oxytocin antagonists enhanced in vitro and in vivo potency but was detrimental to the pharmacokinetic profiles of these compds. Although lipophilic substitution around the pyridine ring of I gave higher affinity in vitro, such substituents were a metabolic liability and caused shortfalls in vivo. Two approaches to prevent this metab. addn. of a cyclic constraint and incorporation of trifluoromethyl groups, were examd. The former approach was ineffective because of metabolic hydroxylation on

L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

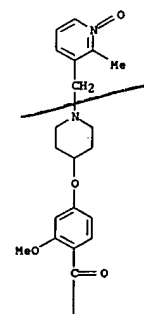
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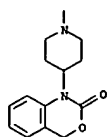
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PAGE 1-A



L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

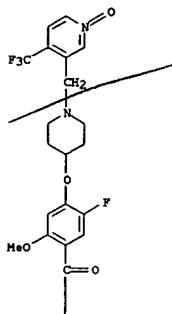
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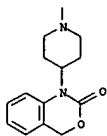
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PAGE 1-A



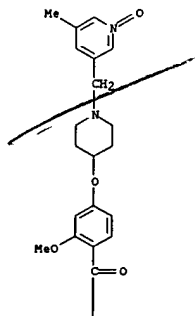
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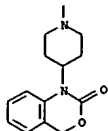


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PAGE 1-A

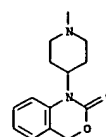


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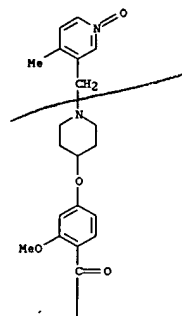
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PAGE 2-A



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PAGE 1-A

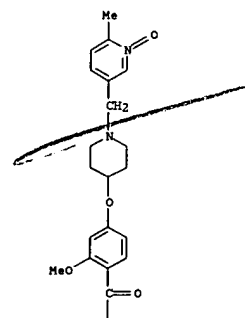


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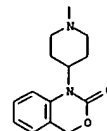
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PAGE 1-A



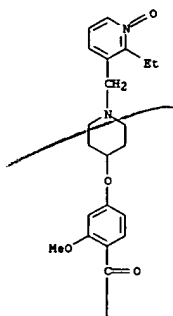
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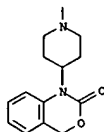
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



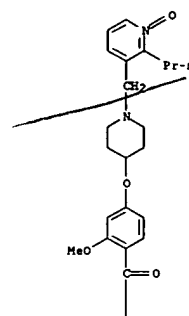
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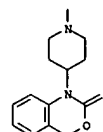
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



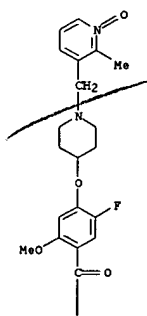
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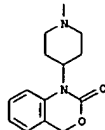
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



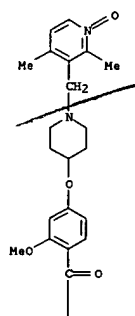
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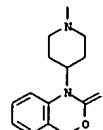
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



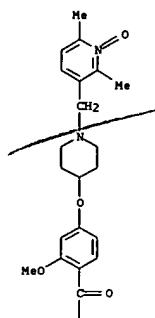
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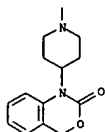
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



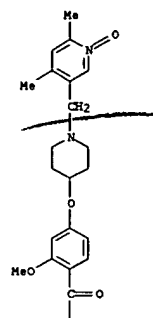
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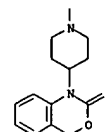
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



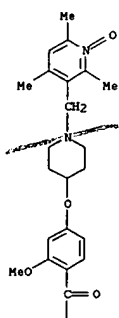
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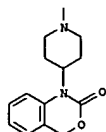
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



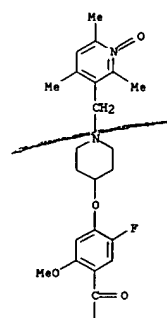
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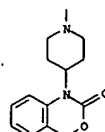
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



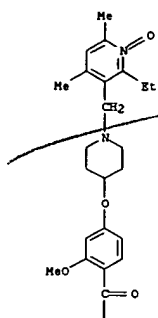
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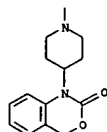
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



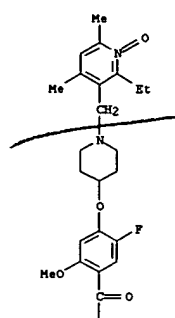
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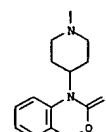
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



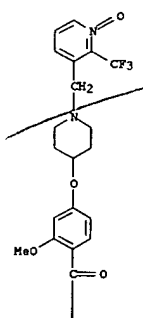
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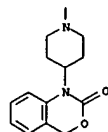
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



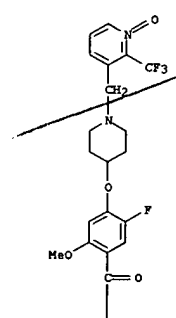
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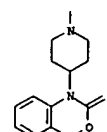
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

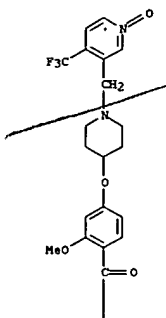


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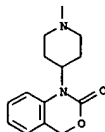
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PAGE 1-A



PAGE 2-A



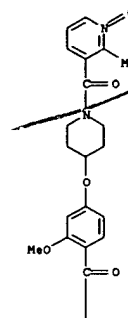
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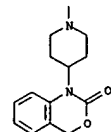
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(Continued)

PAGE 1-A



PAGE 2-A



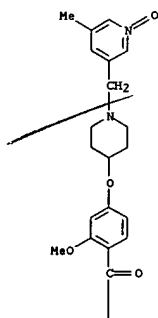
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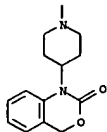
L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

PAGE 1-A



PAGE 2-A



● 3/2 HCl

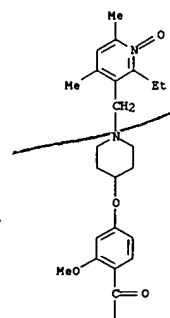
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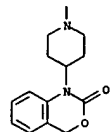
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(Continued)

PAGE 1-A



PAGE 2-A



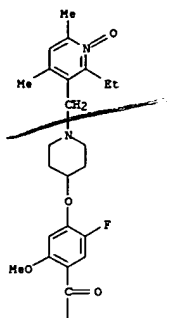
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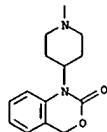
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

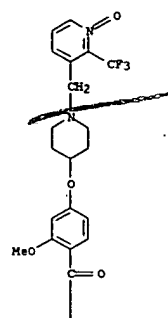


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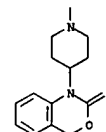
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L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

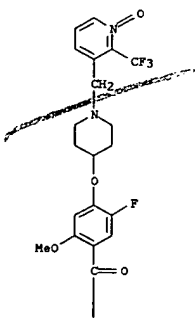


● HCl

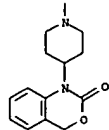
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 CN Piperidine, 1-[5-fluoro-2-methoxy-4-[[[1-oxido-2-(trifluoromethyl)-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

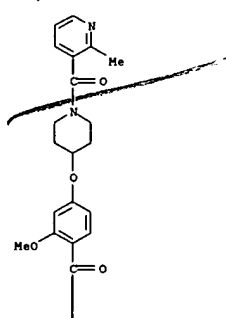


● HCl

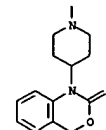
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 (prepn. of pyridinylmethylpiperidinylbenzoylbenzoxazinone as oxytocin antagonists)
 RN 208517-38-8 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[[1-(2-methyl-3-pyridinyl)carbonyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

L15 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



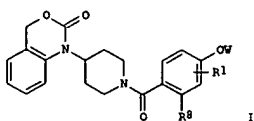
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09/980,451

ANSWER 17 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 1998:180545 CAPLUS
 DOCUMENT NUMBER: 128:217374
 TITLE: Preparation of piperidinylbenzoxazinones as tocolytic oxytocin receptor antagonists.
 INVENTOR(S): Sparks, Michelle A.; Freidinger, Roger M.; Perlow, Debra S.; Williams, Peter D.
 PATENT ASSIGNEE(S): Merck and Co., Inc., USA
 SOURCE: U.S., 36 pp.
 CODEN: USXGAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|-------------------|-----------------|----------|
| US 5726172 | A | 19980310 | US 1997-779296 | 19970106 |
| PRIORITY APPLN. INFO.: | | US 1997-779296 | 19970106 | |
| OTHER SOURCE(S): | | MARPAT 128:217374 | | |



AB Title compds. (I; R1 = H, halo; W = CR2R3R4, azabicyclooctyl, tetrahydrofuryl, etc.; R2 = H, halo, alkyl; R3 = R2, aryl; R4 = haloalkyl, CONH2, cyano, CHMeOH, piperidinyl, etc.; R8 = H, alkoxy), were prepd. Thus, 1-[1-[4-hydroxy-2-methoxybenzoyl]-piperidin-4-yl]-4H-3,1-benzoxazin-2(1H)-one in THF was treated with Ph3P and then with (S)-3-hydroxytetrahydrofuran and di-Et azodicarboxylate to give (R)-1-[1-[4-(tetrahydrofuran-3-oxyl)-2-methoxybenzoyl]piperidin-4-yl]-4H-3,1-benzoxazin-2(1H)-one. In [3H]-oxytocin and [3H]-arginine vasopressin binding assays, representative I showed IC50 = 5-500 nM.

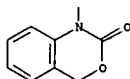
IT 204186-36-7P 204186-39-0P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of piperidinylbenzoxazinones as tocolytic oxytocin receptor antagonists)

RN 204186-36-7 CAPLUS
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Relative stereochemistry.

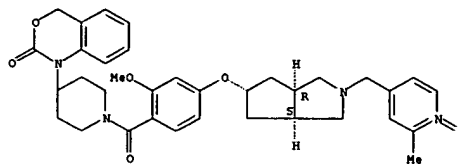
L15 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A



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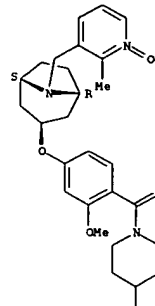
L15 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 204186-39-0 CAPLUS
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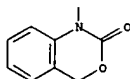
Relative stereochemistry.

PAGE 1-A



L15 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A

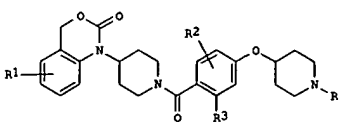


REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:760124 CAPLUS
 DOCUMENT NUMBER: 127:358867
 TITLE: Preparation of 1-(1-benzoyl-4-piperidinyl)-3,1-benzoxazin-2-ones as oxytocin receptor antagonists
 INVENTOR(S): Bell, Ian M.; Freidinger, Roger M.; Williams, Peter D.
 PATENT ASSIGNEE(S): Merck and Co., Inc., USA
 SOURCE: Brit. UK Pat. Appl., 59 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|-------------------|-----------------|----------|
| GB 2310660 | A1 | 19970903 | GB 1997-4025 | 19970226 |
| PRIORITY APPLN. INFO.: | | US 1996-12693P | P | 19960301 |
| | | GB 1996-5648 | A | 19960318 |
| OTHER SOURCE(S): | | MARPAT 127:358867 | | |



AB Title compds. (I; R = (un)substituted (oxido) 3-pyridinylmethyl, -3-pyridinylcarbonyl, -5,6,7,8-tetrahydroquinol-5-yl, etc.; R1, R2 = H or halo; R3 = H or alkoxy) were prepd. Thus, 1-tert-butoxycarbonyl-4-piperidinone was reductively aminated by 2-(HZN)C6H4CH2OH and the cyclized product deprotected to give, after N-acylation by 4-(1-tert-butoxycarbonyl-4-piperidinyl)-2-methoxybenzoic acid (prepn. given) and deprotection, I (R1 = R2 = H, R3 = OMe) (II; R = H) which was N-alkylated by 3-chloromethyl-2-methylpyridine N-oxide (prepn. given) to give II (R = N-oxido-2-methyl-3-pyridinylmethyl). Data for biol. activity of I were given.

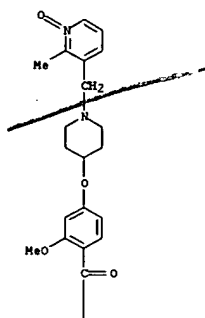
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 198401-69-3P 198401-71-7P 198401-72-8P
 198401-73-9P 198401-74-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of 1-(1-benzoyl-4-piperidinyl)-3,1-benzoxazin-2-ones as oxytocin receptor antagonists)

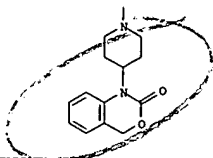
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L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



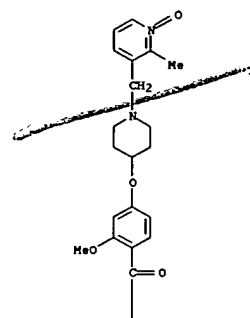
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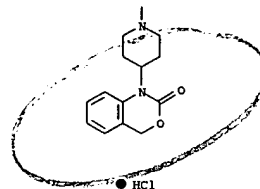
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L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



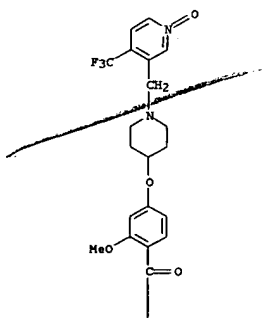
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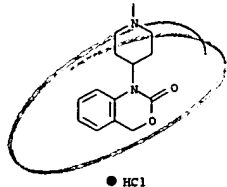
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L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



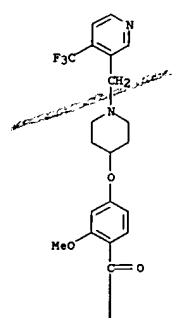
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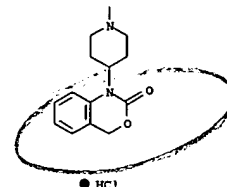
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L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



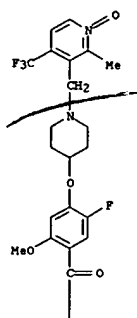
PAGE 2-A



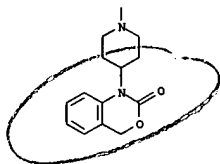
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 CN Piperidine, 1-[[5-fluoro-2-methoxy-4-[[1-[[2-methyl-1-oxido-4-(trifluoromethyl)-3-pyridinyl]methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)]-, hydrochloride (20:13) (9CI) (CA INDEX NAME)

L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



●13/20 HCl

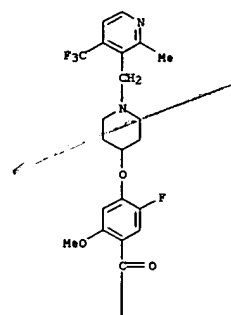
RN 198401-55-7 CAPLUS
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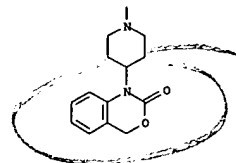
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L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



CM 2

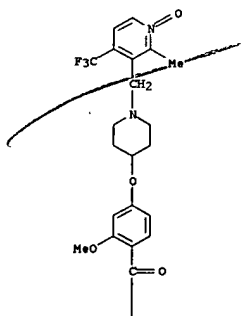
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 CMF C2 H F3 O2

L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

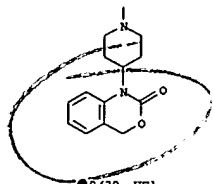


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PAGE 1-A



PAGE 2-A



●9/20 HCl

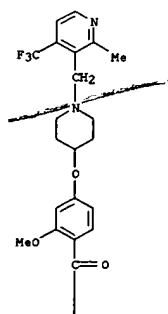
L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

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 CN Piperidine, 1-[2-methoxy-4-[[1-[[2-methyl-4-(trifluoromethyl)-3-pyridinyl]methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, trifluoroacetate (4:7) (9C1) (CA INDEX NAME)

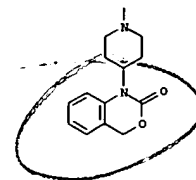
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PAGE 1-A



PAGE 2-A



CM 2

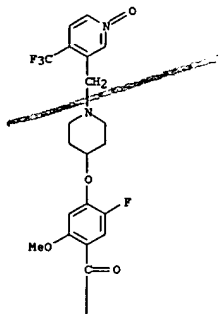
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L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



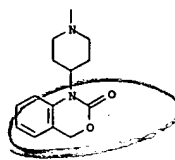
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PAGE 1-A



L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

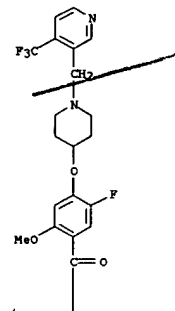
PAGE 2-A



●19/20 HCl

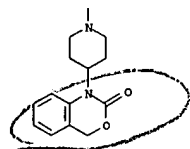
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PAGE 1-A



L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

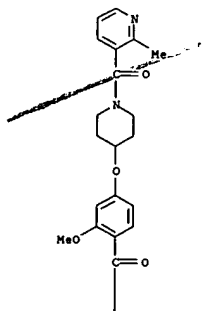
PAGE 2-A



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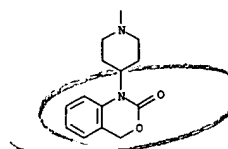
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PAGE 1-A



L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

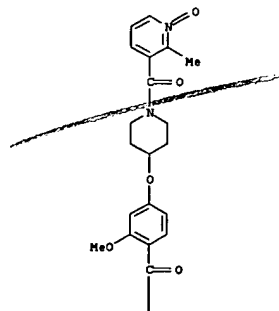
PAGE 2-A



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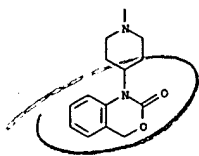
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PAGE 1-A



L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

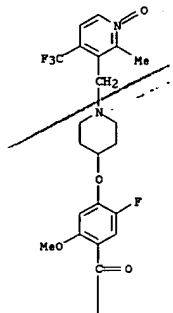
PAGE 2-A



● HCl

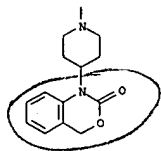
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PAGE 1-A



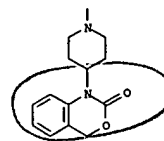
L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A



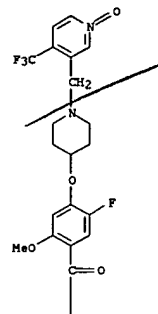
L15 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A



RN 198401-74-0 CAPLUS
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PAGE 1-A



L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:613831 CAPLUS
 DOCUMENT NUMBER: 127:278203
 TITLE: Benzoxazinone and benzopyrimidinone piperidinyl tocolytic oxytocin receptor antagonists
 INVENTOR(S): Bock, Mark G.; Evans, Ben E.; Williams, Peter D.; Freidinger, Roger M.; Pettibone, Douglas J.; Hobbs, Doug W.; Anderson, Paul S.
 PATENT ASSIGNEE(S): Merck and Co., Inc., USA
 SOURCE: U.S., 140 pp., Cont.-in-part of U.S. Ser. No. 92,840, abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|-------------------|-----------------|-------------|
| US 5665719 | A | 19970909 | US 1995-470693 | 19950606 |
| PRIORITY APPLN. INFO.: | | | US 1993-92840 | B2 19930716 |
| OTHER SOURCE(S): | | MARPAT 127:278203 | | |

 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

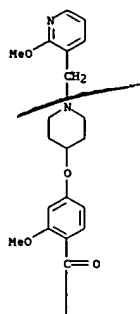
AB Comps. of formula I [X = O, NH, or NR₂; Y = CH₂, CHR₂, or C(R₂)₂; R₁ = camphor-10-yl, alkoxy, styryl, hydroxystyryl, furyl, (un)substituted thienyl, naphthyl, indolyl, tetrahydronaphthyl, (un)substituted pyridyl, pyrazinyl, (un)substituted cyclohexyl or Ph; R₂ = H, alkoxy, alkyl, amino, alkylcarbonylamino, nitro, or halo; R₃ = H, alkoxycarbonyl, cyano, or carbonyl; and n = 0 or 1] and various analogs are disclosed. The comps. as useful as oxytocin (OT) and vasopressin receptor antagonists. Over 275 synthetic examples are given. For instance, Me 2,4-dihydroxybenzoate underwent Mitsunobu etherification with N-(tert-butoxycarbonyl)-4-piperidinol (51%), followed by O-methylation of the remaining hydroxyl (88%), sapon. of the Me ester (95%), and coupling of the resultant acid with 1-(4-piperidinyl)-1,2-dihydro-4H-3,1-benzoxazin-2-one (HCl salt) using EDC and HOBT (89%), to give title compd. II [R = CO₂Bu-tert]. The latter was deprotected with HCl in dioxane (93%) and acetylated with Ac₂O (93%) to give title compd. II [R = Ac]. The latter inhibited binding of [³H]-OT to rat uterine OT receptors in vitro with an IC₅₀ of 47 nM.

IT RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (prepn. of benzoxazinone and benzopyrimidinone derivs. as oxytocin and vasopressin receptor antagonists)

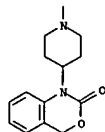
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 CN Piperidine, 1-[2-methoxy-4-[[1-[[2-methoxy-3-pyridinyl]methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



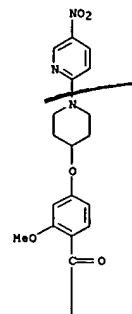
PAGE 2-A



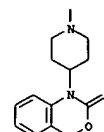
RN 196794-14-6 CAPLUS
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L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



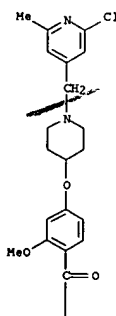
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 162044-05-5P 162044-11-3P 162044-14-6P
 162044-17-9P 162045-26-3P 162045-27-4P
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 196794-20-4P 196794-22-6P 196794-23-7P
 196794-56-6P 196794-57-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of benzoxazinone and benzopyrimidinone derivs. as oxytocin and

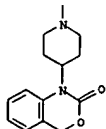
L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 vasopressin receptor antagonists)

RN 162043-77-8 CAPLUS
 CN Piperidine, 1-[4-[[1-[(2-chloro-6-methyl-4-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



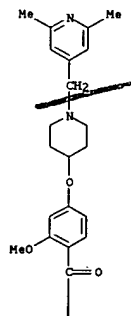
PAGE 2-A



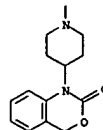
RN 162043-78-9 CAPLUS
 CN Piperidine, 1-[4-[[1-[(2,6-dimethyl-4-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



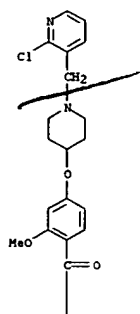
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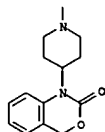
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L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



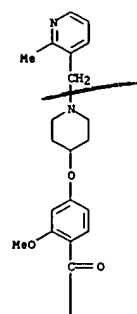
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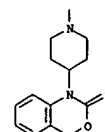
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L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

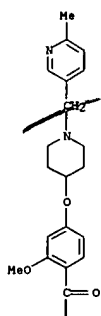


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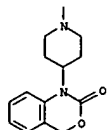
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L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



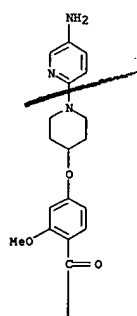
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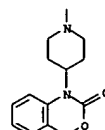
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L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



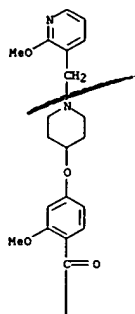
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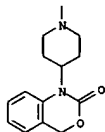
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L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

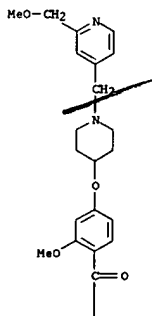


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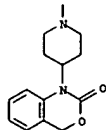
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L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



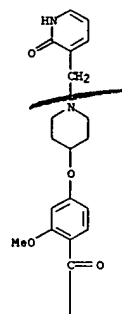
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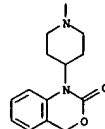
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L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



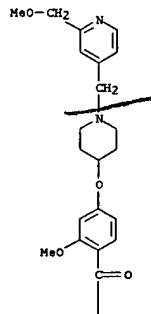
PAGE 2-A



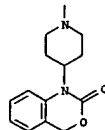
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L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



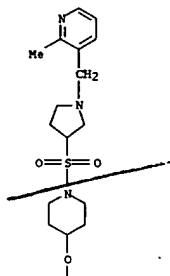
CH 2

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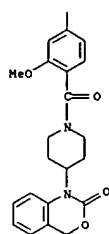
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CN Piperidine, 1-[2-methoxy-4-[[1-[[2-(methyl-3-pyridinyl)methyl]-3-pyrrolidinyl]sulfonyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-

L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 RN 162044-14-6 CAPLUS
 CN benzoxazin-1(4H)-yl-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



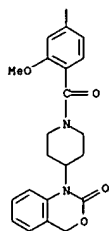
PAGE 2-A



●2 HCl

L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

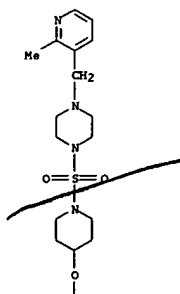
PAGE 2-A



●x HCl

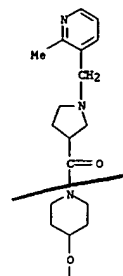
RN 162044-17-9 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[1-[[4-[(2-methyl-3-pyridinyl)methyl]-1-piperazinyl]sulfonyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

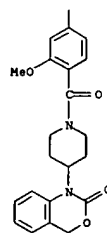


L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 RN 162044-14-6 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[1-[[4-[(2-methyl-3-pyridinyl)methyl]-3-pyrrolidinyl]carbonyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, hydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



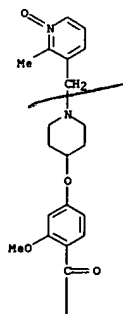
L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 PAGE 2-A



●2 HCl

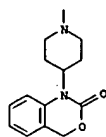
RN 162045-26-3 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[1-[[2-methyl-1-oxido-3-pyridinyl]methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A

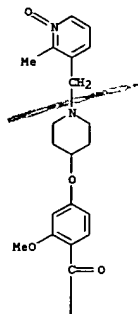


RN 162045-27-4 CAPLUS
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CM 1

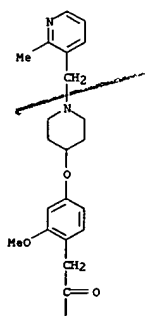
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PAGE 1-A

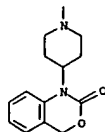


L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

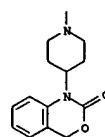


● 2 HCl

RN 162046-44-8 CAPLUS
 CN Piperidine, 1-[[2-methoxy-4-[[1-[(2-methyl-3-pyridinyl)methyl]-4-piperidinyl]oxy]phenyl]acetyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A



CM 2

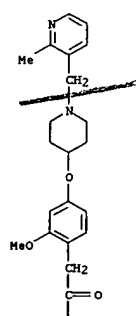
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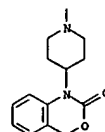
RN 162045-28-5 CAPLUS
 CN Piperidine, 1-[[2-methoxy-4-[[1-[(2-methyl-3-pyridinyl)methyl]-4-piperidinyl]oxy]phenyl]acetyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, dihydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



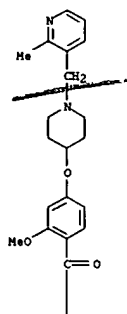
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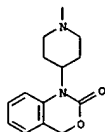
RN 162046-45-9 CAPLUS
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L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



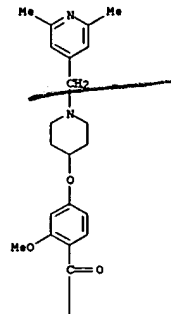
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 CN Piperidine, 1-[[4-[[1-[(2,6-dimethyl-4-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, trifluoroacetate (20:33) (9CI) (CA INDEX NAME)

CM 1

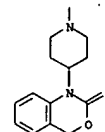
CRN 162043-78-9
 CMF C34 H40 N4 O5

L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



CM 2

CRN 76-05-1
 CMF C2 H F3 O2



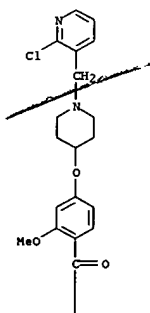
L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 181269-38-5 CAPLUS
 CN Piperidine, 1-[[4-[[1-[(2-chloro-3-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, trifluoroacetate (20:33) (9CI) (CA INDEX NAME)

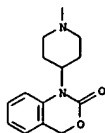
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CRN 162043-80-3
 CMF C32 H35 Cl N4 O5

PAGE 1-A



PAGE 2-A



CM 2

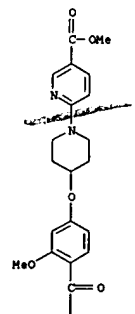
CRN 76-05-1
 CMF C2 H F3 O2

L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

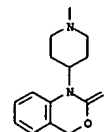
RN 196794-13-5 CAPLUS
 CN 3-Pyridinecarboxylic acid, 6-[4-[3-methoxy-4-[[4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]carbonyl]phenoxy]-1-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)



PAGE 1-A

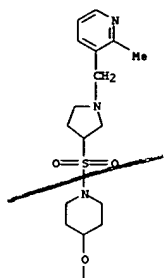


PAGE 2-A

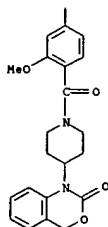


RN 196794-20-4 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[1-[[1-[(2-methyl-3-pyridinyl)methyl]-3-pyrrolidinyl]sulfonyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

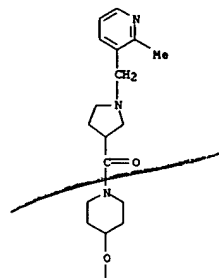


PAGE 2-A

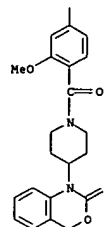


RN 196794-22-6 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[[1-[[[2-methyl-3-pyridinyl)methyl]-3-pyrrolidinyl]carbonyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

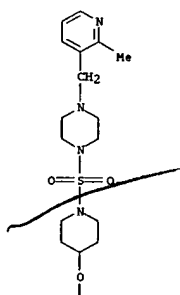


PAGE 2-A

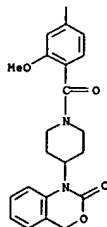


RN 196794-23-7 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[[1-[[[2-methyl-3-pyridinyl)methyl]-3-piperazinyl]sulfonyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

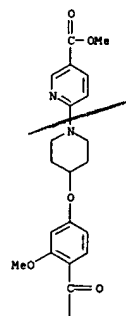


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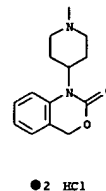


RN 196794-56-6 CAPLUS
 CN 3-Pyridinecarboxylic acid, 6-[4-[3-methoxy-4-[[[4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]carbonyl]phenoxy]-1-piperidinyl]-, methyl ester, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



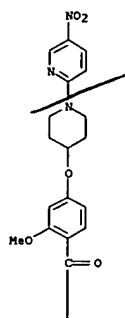
● 2 HCl

RN 196794-57-7 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[[1-[[[5-nitro-2-pyridinyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, hydrochloride (2:5) (9CI) (CA INDEX NAME)

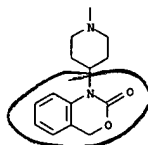
09/980,451

L15 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

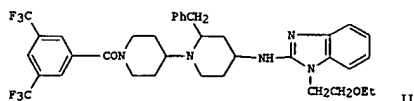
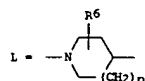
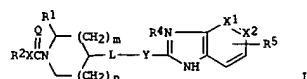


● 5/2 HCl

L15 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 1997:516068 CAPLUS
 DOCUMENT NUMBER: 127:135802
 TITLE: N-acyl-2-substituted-4-(benzimidazolyl- or indazopyridinyl)piperidines as tachykinin antagonists
 INVENTOR(S): Janssens, Frans Eduard; Sommen, Francois Maria; Surlierraux, Dominique Louis Nestor Ghislaine
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.
 SOURCE: PCT Int. Appl., 50 pp.
 CODEN: PIXXKD
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-------------------|------------|
| WO 9724350 | A1 | 19970710 | WO 1996-EP5877 | 19961220 |
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| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, EF, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| TW 429256 | B | 20010411 | TW 1996-85115389 | 19961213 |
| CA 2238816 | AA | 19970710 | CA 1996-2238816 | 19961220 |
| AU 9713080 | A1 | 19970728 | AU 1997-13080 | 19961220 |
| AU 707116 | B2 | 19990701 | | |
| EP 869955 | A1 | 19981014 | EP 1996-944686 | 19961220 |
| EP 869955 | B1 | 20011024 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI | | | | |
| BR 9612326 | A | 19990713 | BR 1996-12326 | 19961220 |
| JP 2000502689 | T2 | 20000307 | JP 1997-524029 | 19961220 |
| AT 207484 | E | 20011115 | AT 1996-944686 | 19961220 |
| ES 2166915 | T3 | 20020501 | ES 1996-944686 | 19961220 |
| PL 184489 | B1 | 20021129 | PL 1996-327440 | 19961220 |
| ZA 9610894 | A | 19980623 | ZA 1996-10894 | 19961223 |
| NO 9802406 | A | 19980824 | NO 1998-2406 | 19980527 |
| US 6110939 | A | 20000829 | US 1998-102121 | 19980619 |
| HK 1012187 | A1 | 20020308 | HK 1998-113363 | 19981215 |
| PRIORITY APPLN. INFO.: | | | EP 1995-203650 | A 19951227 |
| | | | EP 1995-203653 | A 19951227 |
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| OTHER SOURCE(S): | | | MARPAT 127:135802 | |
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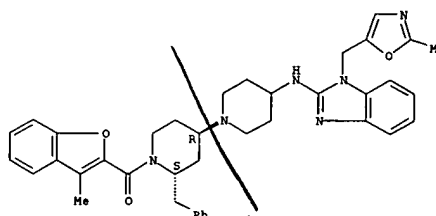
L15 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



AB Title compds. I {n = 0-2; m = 1, 2; X = bond, O, S, NR3; X1, X2 = CH, N; Q = O, NR3; R1 = aryl, aralkyl, diarylalkyl; R2 = aryl, aralkyl, heterocyclyl, heterocyclylalkyl; L = Q1; R3 = H, alkyl; R4 = (un)substituted alkyl; R5 = H, halogen, OH, alkoxy; R6 = H, alkyl, aralkyl; p = 0-2} were prepd. for use as substance P antagonists. Thus, (+-)-tert-Bu 7-benzyl-1,4-dioxo-8-azaspiro[4.5]decane-8-carboxylate was treated with 3,5-(F3C)2C6H3COCl, followed by 1-(2-ethoxyethyl)-2-(4-piperidinylamino)benzimidazole to give the title compd. II. Cis-II gave 80.7% inhibition of substance P-induced relaxation of pig coronary artery at 3 X 10⁻⁸ M while trans-II gave 85.3 % inhibition.
 IT 193200-66-79
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of benzimidazolyl- and indazopyridinylpiperidines as tachykinin antagonists)
 RN 193200-66-7 CAPLUS
 CN {1,4'-Bipiperidin]-4-amine, 1'-[(3-methyl-2-benzofuranyl)carbonyl]-N-[1-[(2-methyl-5-oxazolyl)methyl]-1H-benzimidazol-2-yl]-2'-[(phenylmethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

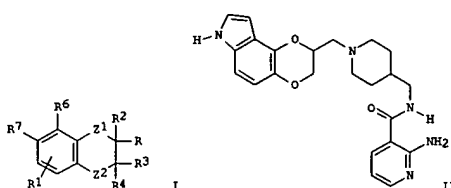
L15 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



09/980,451

115 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 ACCESSION NUMBER: 1997:506290 CAPLUS
 DOCUMENT NUMBER: 127:135806
 TITLE: Preparation of heteroarylcarboxamides as nervous system agents
 INVENTOR(S): Birch, Alan Martin; Bradley, Paul Anthony; Gill, Julie Carolyn
 PATENT ASSIGNEE(S): Knoll Aktiengesellschaft, Germany; Birch, Alan Martin; Bradley, Paul Anthony; Gill, Julie Carolyn
 SOURCE: PCT Int. Appl., 51 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

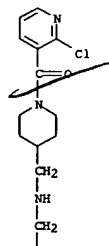
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 9723485 | A1 | 19970703 | WO 1996-EP5637 | 19961216 |
| W: AU, BG, BR, CA, CN, CZ, GE, HU, IL, JP, KR, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| AU 9711958 | A1 | 19970717 | AU 1997-11958 | 19961216 |
| EP 876372 | A1 | 19981111 | EP 1996-943129 | 19961216 |
| EP 876372 | B1 | 20020306 | | |
| R: DE, FR, GB, IT | | | | |
| JP 2000502662 | T2 | 20000307 | JP 1997-523278 | 19961216 |
| US 6107310 | A | 20000822 | US 1998-91129 | 19980616 |
| PRIORITY APPLN. INFO.: | | | GB 1995-26495 | A 19951223 |
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| OTHER SOURCE(S): | | | MARPAT 127:135806 | |
| GI | | | | |



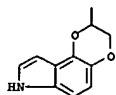
AB Title compds. [I: R = 2324R8; R1 = 1 or 2 of H, halo, alkyl, alkoxy, etc.; R2 = H, alkyl, alkoxy; R3, R4 = H or alkyl; R6, R7 = (unsubstituted) NHCH₂CH₂, -N:CHNH₂, -NHCH₂N, etc.; R8 = (unsubstituted) heteroarylcarbonyl; Z1, Z2 = O or CH₂; Z3 = alkylene; Z4 = NRS2S26, 2625NRS, etc.; R5 = H or alkyl; Z5 =

115 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 CN 4-Piperidinemethanamine, 1-[(2-chloro-3-pyridinyl)carbonyl]-N-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

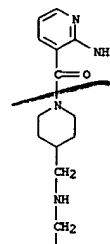


PAGE 2-A

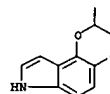


115 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 alkylene; Z6 = N-attached heterocyclylene] were prepd. as 5-HT1A and/or .alpha.1 and/or D2-like receptor ligands. Thus, Et 4-formyl-5-hydroxyindole-2-carboxylate was etherified by (R)-glycidyl tosylate and the product converted in 6 steps to title compd. II. Data for Biol. activity of I were given.
 IT 193197-54-5P 193197-55-6P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of heteroarylcarboxamides as nervous system agents)
 RN 193197-54-5 CAPLUS
 CN 4-Piperidinemethanamine, 1-[(2-amino-3-pyridinyl)carbonyl]-N-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



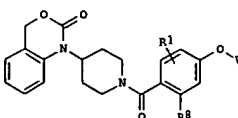
PAGE 2-A



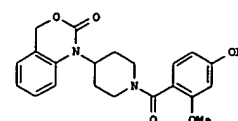
RN 193197-55-6 CAPLUS

115 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 1997:499106 CAPLUS
 DOCUMENT NUMBER: 127:190743
 TITLE: Preparation of benzoxazinones as nociceptive oxytocin receptor antagonists
 INVENTOR(S): Sparks, Michelle A.; Friedinger, Roger M.; Perlow, Debra S.; Williams, Peter D.
 PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Sparks, Michelle A.; Friedinger, Roger M.; Perlow, Debra S.; Williams, Peter D.
 SOURCE: PCT Int. Appl., 113 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-------------------|------------|
| WO 9725992 | A1 | 19970724 | WO 1997-US571 | 19970113 |
| W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KR, KZ, LC, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9716989 | A1 | 19970811 | AU 1997-16989 | 19970113 |
| PRIORITY APPLN. INFO.: | | | US 1996-10034P | F 19960116 |
| | | | GB 1996-5701 | A 19960319 |
| | | | WO 1997-US571 | W 19970113 |
| OTHER SOURCE(S): | | | MARPAT 127:190743 | |
| GI | | | | |



I

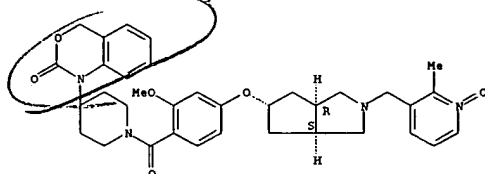


II

AB The title compds. [I: R1 = H, halo; W = CR2R3R4, CHR3Ar, etc.; R2 = H,

L15 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 halo, Cl-5 alkyl; R3 = H, halo, Cl-5 alkyl; Ar; R4 = mono-, di-, tri-halogenated Cl-5 alkyl, CORH2, etc.; R5 = H, Cl-5 alkoxy; Ar = Ph, CF3CGH4, naphthyl, etc.; oxytocin receptor antagonists which are useful in treating preterm labor, dysmenorrhea, stopping labor prior to cesarean delivery, increasing fertility and embryonic survival, and controlling the timing of estrus in a farm animal, were prepd. and formulated. Thus, reaction of benzoxazinone II with Ph2CHBr in the presence of Cs2CO3 in DMF afforded I [R1 = H; W = diphenylmethyl; R8 = MeO]. Representative compds. I showed IC50 of 5-500 nM against [3H]oxytocin and [3H]arginine vasopressin binding.
 IT 194151-13-8P 194151-56-9P
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of benzoxazinones as tocolytic oxytocin receptor antagonists)
 RN 194151-13-8 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[octahydro-2-[(2-methyl-1-oxido-3-pyridinyl)methyl]cyclopenta[c]pyrrol-5-yl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, (3a.alpha.,5.alpha.,6a.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

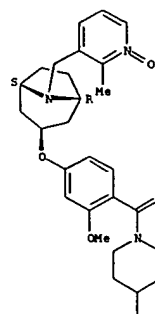


RN 194151-56-9 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[8-[(2-methyl-1-oxido-3-pyridinyl)methyl]-8-azabicyclo[3.2.1]oct-3-yl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, dihydrochloride, exo- (9CI) (CA INDEX NAME)

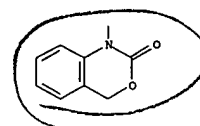
Relative stereochemistry.

L15 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



● 2 HCl

L15 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 1997:499057 CAPLUS
 DOCUMENT NUMBER: 127:149145
 TITLE: 1-(1,2-Disubstituted piperidinyl)-4-(fused imidazole)piperidine derivatives useful as substance P antagonists
 INVENTOR(S): Janssens, Frans Eduard; Lunaerts, Joseph E.; Van Roosbroeck, Yves E. M.
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.
 SOURCE: PCT Int. Appl., 44 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|------------------|----------|
| WO 9724356 | A1 | 19970710 | WO 1996-EP5885 | 19961220 |
| W: AL, AM, AU, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KR, LC, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, BF, BJ, CF, CG, CH, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| TW 382017 | B | 20000211 | TW 1996-85115390 | 19961213 |
| CA 2238817 | AA | 19970710 | CA 1996-2238817 | 19961220 |
| AU 9713086 | A1 | 19970728 | AU 1997-13086 | 19961220 |
| AU 716071 | B2 | 20000217 | | |
| EP 843679 | A1 | 19980527 | EP 1996-944693 | 19961220 |
| EP 843679 | B1 | 20011107 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI | | | | |
| CN 1206417 | A | 19990127 | CN 1996-199396 | 19961220 |
| CN 1066733 | B | 20010606 | | |
| BR 9612307 | A | 19990713 | BR 1996-12307 | 19961220 |
| JP 2000506503 | T2 | 20000530 | JP 1997-524033 | 19961220 |
| AT 208392 | E | 20011115 | AT 1996-944693 | 19961220 |
| IL 124641 | A1 | 20011125 | IL 1996-124641 | 19961220 |
| ES 2167619 | T3 | 20020516 | ES 1996-944693 | 19961220 |
| PL 183767 | B1 | 20020731 | PL 1996-327136 | 19961220 |
| ZA 9610889 | A | 19980623 | ZA 1996-10889 | 19961223 |
| NO 9802405 | A | 19980919 | NO 1998-2405 | 19980527 |
| US 6251894 | B1 | 20010626 | US 1998-102136 | 19980622 |
| HK 1011206 | A1 | 20020322 | HK 1998-112228 | 19981124 |

PRIORITY APPLN. INFO.: EP 1995-203652 A 19951227
 WO 1996-EP5885 W 19961220
 OTHER SOURCE(S): MARPAT 127:149145
 GI

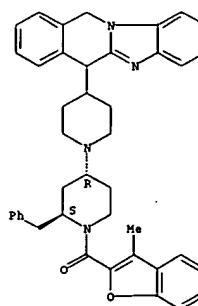
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention concerns compds. I and their N-oxides, pharmaceutically acceptable addn. salts, and stereoisomers [wherein n = 0, 1, or 2; m = 1 or 2, provided that if m = 2, then n = 1; Q = O or NR3; X = bond, O, S, or NR3; R1 = Ar1, Ar1-alkyl, or di-Ar1-alkyl, wherein each alkyl group is optionally substituted; R2 = Ar2, Ar2-alkyl, Het, Het-alkyl; R3 = H or

L15 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 alkyl; L = piperidine group Q1 or spiro-piperidine group Q2; Ar1 = (un)substituted Ph; Ar2 = naphthalenyl, (un)substituted Ph; Het = (un)substituted mono- or bicyclic heterocycle; AB = atoms to form (un)substituted benzo or certain 5-membered hetero fusions; dotted line = optional pi bond; Z = CH2, CH2CH2, CH=CH, CH2CH(OH), CH2O, CH2CO, CH2C(=NOH), with provisos; R4 = H, alkyl, halo, carboxyalkyl, etc.; R5 = H, alkyl, hydroxyalkyl, Ar1, halo, or R4R5 = CH:CHCH:CH, (CH2)4; R6 = H, alkyl, Ar1-alkyl. I are substance P antagonists, and are useful for treating a variety of conditions, esp. pain, emesis, or asthma. For instance, reductive amination of 1-(3,5-dimethylbenzoyl)-2-(phenylmethyl)-4-piperidinone with 6,11-dihydro-11-(4-piperidinyl)-5H-imidazo[2,1-b][3]benzazepine, by hydrogenation in the presence of a thiophene-poisoned Pd/C catalyst, gave title compd. II. In a test for antagonism of substance P-induced relaxation of isolated pig coronary arteries, I gave up to 100% inhibition at 3 .times. 10-9 M.
 IT 193469-06-6P
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of piperidinyl(fused imidazole)piperidine derivs. as substance P antagonists)
 RN 193469-06-6 CAPLUS
 CN 1,4'-Bipiperidine, 4-(6,11-dihydrobenzimidazo[1,2-b]isoquinolin-6-yl)-1'-[(3-methyl-2-benzofuranyl)carbonyl]-2'-(phenylmethyl)-, (2'.alpha.,4'.beta.)-[partial]- (9CI) (CA INDEX NAME)

IT 193469-06-6P
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of piperidinyl(fused imidazole)piperidine derivs. as substance P antagonists)
 RN 193469-06-6 CAPLUS
 CN 1,4'-Bipiperidine, 4-(6,11-dihydrobenzimidazo[1,2-b]isoquinolin-6-yl)-1'-[(3-methyl-2-benzofuranyl)carbonyl]-2'-(phenylmethyl)-, (2'.alpha.,4'.beta.)-[partial]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

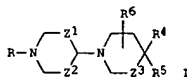


09/980,451

L15 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 1997:499056 CAPLUS
 DOCUMENT NUMBER: 127:149078
 TITLE: Preparation of aroyl 4-piperidinopiperidides and analogs as tachykinin receptor antagonists
 INVENTOR(S): Janssens, Frans Eduard; Sommen, Francois Maria; Surleaux, Dominique Louis Nestor Ghislaine
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.
 SOURCE: PCT Int. Appl., 48 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 9724324 | A1 | 19970710 | WO 1996-EP5883 | 19961220 |
| W: AL, AM, AU, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KR, LC, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2238818 | AA | 19970710 | CA 1996-2238818 | 19961220 |
| AU 9713084 | A1 | 19970728 | AU 1997-13084 | 19961220 |
| AU 707037 | B2 | 19990701 | | |
| EP 855999 | A1 | 19980805 | EP 1996-944691 | 19961220 |
| EP 855999 | B1 | 20011004 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI | | | | |
| BR 9612334 | A | 19990302 | BR 1996-12334 | 19961220 |
| JP 2000502690 | T2 | 20000307 | JP 1997-524031 | 19961220 |
| AT 206397 | E | 20011015 | AT 1996-944691 | 19961220 |
| ES 2164939 | T3 | 20020301 | ES 1996-944691 | 19961220 |
| IL 124640 | A1 | 20020523 | IL 1996-124640 | 19961220 |
| ZA 9610885 | A | 19980623 | ZA 1996-10885 | 19961223 |
| NO 9802404 | A | 19980819 | NO 1998-2404 | 19980527 |
| US 6169097 | B1 | 20010102 | US 1998-102295 | 19980622 |
| HK 1011205 | A1 | 20020309 | HK 1998-112227 | 19981124 |
| US 6346540 | B1 | 20020212 | US 2000-615523 | 20000713 |

PRIORITY APPLN. INFO.:
 OTHER SOURCE(S): MARPAT 127:149078
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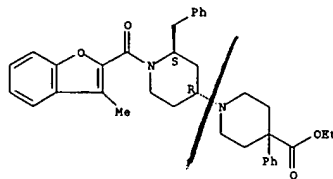
L15 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 1997:204149 CAPLUS
 DOCUMENT NUMBER: 126:199573
 TITLE: Heterocyclylcarboxamide derivatives for use as neurotransmitter agonists
 INVENTOR(S): Birch, Alan Martin; Heal, David John; Kerrigan, Frank; Martin, Keith; Needham, Patricia Lesley; Sargent, Bruce Jeremy
 PATENT ASSIGNEE(S): Knoll Aktiengesellschaft, Germany; Birch, Alan Martin; Heal, David John; Kerrigan, Frank; Martin, Keith; Needham, Patricia Lesley; Sargent, Bruce Jeremy
 SOURCE: PCT Int. Appl., 93 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------------------------------------------------------------------------------------------------------|------|----------|------------------|----------|
| WO 9703071 | A1 | 19970130 | WO 1996-EP2890 | 19960702 |
| W: AU, BG, BR, CA, CN, CZ, GE, HU, IL, JP, KR, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| CA 2223472 | AA | 19970130 | CA 1996-2223472 | 19960702 |
| AU 9665172 | A1 | 19970210 | AU 1996-65172 | 19960702 |
| AU 708890 | B2 | 19990812 | | |
| EP 839145 | A1 | 19980506 | EP 1996-924847 | 19960702 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LV, FI | | | | |
| CN 1190967 | A | 19980819 | CN 1996-195477 | 19960702 |
| CN 1071755 | B | 20010926 | | |
| BR 9609506 | A | 19990601 | BR 1996-9506 | 19960702 |
| JP 11508599 | T2 | 19990727 | JP 1996-505471 | 19960702 |
| RU 2169147 | C2 | 20010620 | RU 1998-102441 | 19960702 |
| IL 122540 | A1 | 20011031 | IL 1996-122540 | 19960702 |
| ZA 9605921 | A | 19980112 | ZA 1996-5921 | 19960712 |
| TW 454006 | B | 20010911 | TW 1996-85115692 | 19961219 |
| US 5935973 | A | 19990810 | US 1998-981671 | 19980105 |
| NO 9800129 | A | 19980112 | NO 1998-129 | 19980112 |

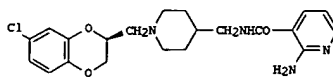
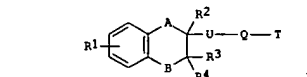
PRIORITY APPLN. INFO.:
 OTHER SOURCE(S): MARPAT 126:199573
 GI

L15 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 AB Title compds. I; R = C(=O)R2; R1 = (un)substituted (di)phenyl(alkyl); R2 = (un)substituted phenyl(alkyl), heteroaryl(alkyl), etc.; R4 = H, alkyl, alkoxy, carbonyl, Ph, etc.; R5 = H, OH, NH2, phenyl(alkoxy), etc.; R6RS = atoms to form a ring; R6 = H, OH, (phenyl)alkyl, alkoxy, etc.; X = O or (alkyl)imino; Z = bond, O, S, (alkyl)imino; Z1 = CH2 or CH2CH2; Z2, Z3 = bond, CH2, CH2CH2 were prepd. Thus, 1,1-dimethylethyl 4-oxo-2-phenylmethylpiperidine-1-carboxylate was reductively condensed with N-(4-phenyl-4-piperidinyl)acetamide and the product deprotected to give I (R1 = CH2Ph, R4 = Ph, R5 = NHAc, R6 = H, Z1 = Z2 = Z3 = CH2) (I); R = H) which was anidated by 2,4-dimethylthiazole-5-carboxylic acid to give II (R = 2,4-dimethyl-5-thiazolylcarbonyl). Data for biol. activity of I were given.
 IT 193479-87-7p
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of aroyl 4-piperidinopiperidides and analogs as tachykinin receptor antagonists)
 RN 193479-87-7 CAPLUS
 CN [1,4'-Bipiperidine]-4-carboxylic acid, 1'-[(3-methyl-2-benzofuran-1-yl)carbonyl]-4-phenyl-2'-(phenylmethyl)-, ethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



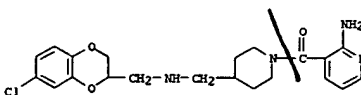
L15 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



AB Title compds. I [A, B = CH2, Or R1 = optional substituent(s); R2-R4 = H, (un)substituted alkyl; U = (un)branched alkylene; Q = N-contg. divalent group; T = heterocyclylcarbonyl attached to N in Q] were prepd. for use in treating central nervous system disorders. Thus, the benzodioxane II was prepd. from 5-chloro-2-hydroxybenzaldehyde, (R)-glycidyl tosylate, and 4-aminomethylpiperidine in 8 steps. II had a Ki for 5-HT1.alpha. receptor binding of 41.5 nM and also bound to the .alpha.2A, 2D, and .alpha.1 receptors.
 IT 187542-94-5P 187543-09-5P 187543-14-2P 187543-17-5P 187543-24-4P 187543-27-7P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of benzodioxanymethylpiperidinylmethylcarbamoylpyridines as neurotransmitter agonists)
 RN 187542-94-5 CAPLUS
 CN 4-Piperidinemethanamine, 1-[(2-amino-3-pyridinyl)carbonyl]-N-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-, (2E)-2-butenedioate (5:8) (9CI) (CA INDEX NAME)

CN 1

CRN 187542-93-4
 CHF C21 H25 C1 N4 O3

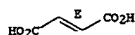


CN 2

CRN 110-17-8
 CHF C4 H4 O4

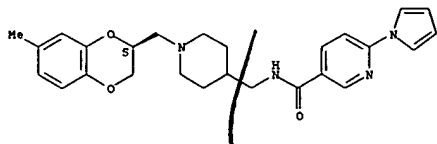
09/980,451

L15 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
Double bond geometry as shown.



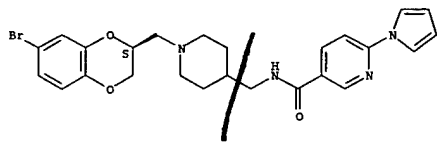
RN 187543-09-5 CAPLUS
CN 3-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-7-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl)methyl]-6-(1H-pyrrol-1-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 187543-14-2 CAPLUS
CN 3-Pyridinecarboxamide, N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl)methyl]-6-(1H-pyrrol-1-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

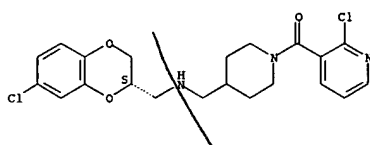


RN 187543-17-5 CAPLUS
CN 3-Pyridinecarboxamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl)methyl]-6-(1H-pyrrol-1-yl)-, (S)- (9CI) (CA INDEX NAME)

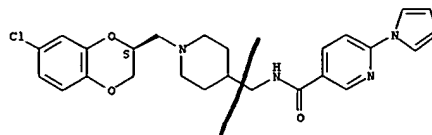
Absolute stereochemistry.

L15 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
NAME)

Absolute stereochemistry.

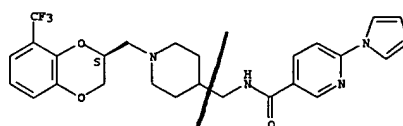


L15 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



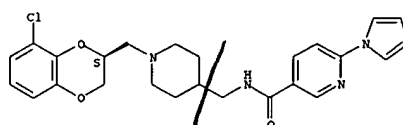
RN 187543-24-4 CAPLUS
CN 3-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-8-(trifluoromethyl)-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl)methyl]-6-(1H-pyrrol-1-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 187543-27-7 CAPLUS
CN 3-Pyridinecarboxamide, N-[[1-[(8-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl)methyl]-6-(1H-pyrrol-1-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

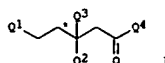


IT 187543-74-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of benzodioxanylethylmethylpiperidinylethylmethylcarbamoylpyridines as neurotransmitter agonists)
RN 187543-74-4 CAPLUS
CN 4-Piperidinemethanamine, N-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-[(2-chloro-3-pyridinyl)carbonyl]-, (S)- (9CI) (CA INDEX NAME)

L15 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

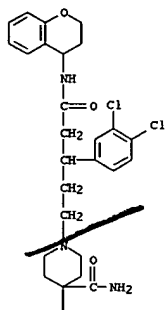
ACCESSION NUMBER: 1996:609954 CAPLUS
DOCUMENT NUMBER: 125:247623
TITLE: Preparation of 5-[(4-substituted)piperidin-1-yl]-3-arylpentanoic acid-derivative tachykinin receptor antagonists
INVENTOR(S): Bernstein, Peter Robert; Dembofsky, Bruce Thomas; Jacobs, Robert Toms
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 110 pp.
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------------|-----------------|------------|
| WO 9624582 | A1 | 19960815 | WO 1996-GB259 | 19960208 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN | | | | |
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| AU 714289 | B2 | 19991223 | | |
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| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| CN 1181069 | A | 19980506 | CN 1996-193228 | 19960208 |
| JP 10513191 | T2 | 19981215 | JP 1996-524072 | 19960208 |
| AT 202342 | E | 20010715 | AT 1996-901904 | 19960208 |
| ES 2159717 | T3 | 20011016 | ES 1996-901904 | 19960208 |
| ZA 9601069 | A | 19960812 | ZA 1996-1069 | 19960209 |
| FI 9703283 | A | 19971007 | FI 1997-3283 | 19970808 |
| NO 9703652 | A | 19971008 | NO 1997-3652 | 19970808 |
| PRIORITY APPLN. INFO.: | | | GB 1995-2644 | A 19950210 |
| | | | WO 1996-GB259 | W 19960208 |
| OTHER SOURCE(S): | | MARPAT 125:247623 | | |
| G1 | | | | |



AB The title compds. (I; Q1-Q4 have the meanings given in the claims; * = an optionally asyn. center) [e.g., N-benzyl-5-(4-hydroxy-4-phenylpiperidino)-3-(3,4-dichlorophenyl)pentanamide; m.p. 64-67.degree.] are nonpeptide antagonists of substance P and NKA (e.g., neurokinin NK1 and NK2 receptors), useful for the treatment of asthma (no data), etc. (no data), are prepd.

L15 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 IT 181879-82-3P 181880-04-6P
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of 5-[(4-substituted)piperidin-1-yl]-3-arylpentanoic acid-deriv. tachykinin receptor antagonists)
 RN 181879-82-3 CAPLUS
 CN [1,4'-Bipiperidine]-1'-pentanamide, 4'-(aminocarbonyl)-.beta.-(3,4-dichlorophenyl)-N-(3,4-dihydro-2H-1-benzopyran-4-yl)- (9CI) (CA INDEX NAME)



PAGE 1-A

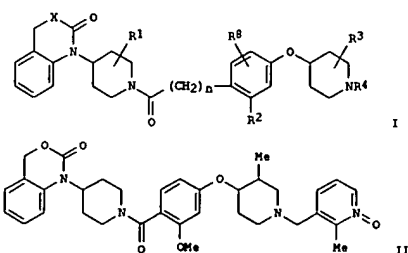


PAGE 2-A

RN 181880-04-6 CAPLUS
 CN [1,4'-Bipiperidine]-1'-pentanamide, .beta.-(3,4-dichlorophenyl)-N-(3,4-dihydro-2H-1-benzopyran-4-yl)-4'-[(methylamino)carbonyl]-2-oxo- (9CI) (CA INDEX NAME)

L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 SECTION NUMBER: 1996:583976 CAPLUS
 DOCUMENT NUMBER: 125:221854
 TITLE: Preparation of tocolytic oxytocin receptor antagonists
 INVENTOR(S): Williams, Peter D.; Freidinger, Roger M.
 PATENT ASSIGNEE(S): Merck and Co., Inc., USA
 SOURCE: PCT Int. Appl., 235 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

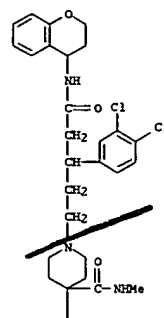
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| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2210138 | AA | 19960801 | CA 1996-2210138 | 19960119 |
| AU 9647638 | A1 | 19960814 | AU 1996-47638 | 19960119 |
| EP 805681 | A1 | 19971112 | EP 1996-903618 | 19960119 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE | | | | |
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| | | | WO 1996-US850 | 19960119 |
| OTHER SOURCE(S): | | MARPAT 125:221854 | | |
| GI | | | | |



AB The title compds. [I; R1 = H, (un)substituted alkyl, alkoxy, CO2H, CONH2; R2 = H, alkoxy; R3 = H, (un)substituted alkyl, alkoxy, CO2H, CONH2; R4 = H, alkoxy, CO2H, CONH2, alkyl, (un)substituted pyridylmethyl, etc.; R8 = H, alkyl, halogen; X = CH2, O, n = 0, 1], useful as oxytocin receptor antagonists (e.g., IC50 = 2-1000 nM) for the treatment of preterm labor (no data), dysmenorrhea (no data), and stopping preterm labor prior to cesarean delivery (no data), are prepd. and a 1-contg. formulation is

L15 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A

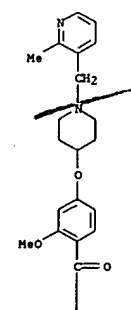


PAGE 2-A



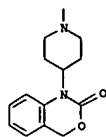
L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 presented. Thus, 1-[1-[(4-(3-methyl-4-piperidinyl)oxy)-2-methoxybenzoyl]piperidin-4-yl]-4H-3,1-benzoxazin-2(1H)-one was reacted with 3-(chloromethyl)-2-methylpyridine-N-oxide, producing benzoxazinone II.
 IT 162043-82-5P 181269-27-2P 181269-28-3P
 181269-29-4P 181269-31-8P 181269-37-4P
 181269-39-5P 181269-42-1P 181269-46-5P
 181269-52-3P 181269-56-7P 181269-57-8P
 181269-58-9P 181269-59-0P 181269-60-3P
 181269-61-4P 181269-62-5P 181269-63-6P
 181269-64-7P 181269-65-8P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of tocolytic oxytocin receptor antagonists)
 RN 162043-82-5 CAPLUS
 CN Piperidine, 1-[2-methoxy-4-[[1-[(2-methyl-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

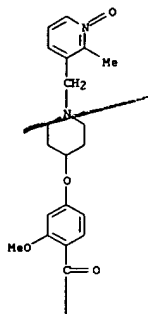
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● HCl

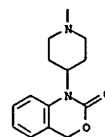
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 CN Piperidine, 1-[2-methoxy-4-[[1-[(2-methyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

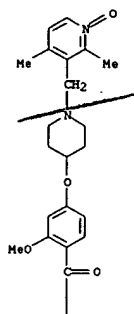
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● HCl

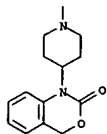
RN 181269-28-3 CAPLUS
 CN Piperidine, 1-[4-[[1-[(2,4-dimethyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, hydrochloride (5:7) (9CI) (CA INDEX NAME)

PAGE 1-A



L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

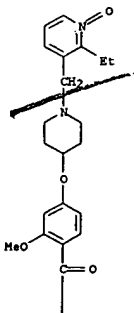
PAGE 2-A



● 7/5 HCl

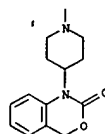
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 CN Piperidine, 1-[4-[[1-[(2-ethyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, hydrochloride (4:5) (9CI) (CA INDEX NAME)

PAGE 1-A



L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A



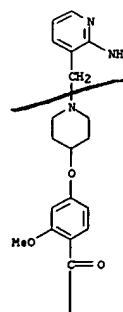
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RN 181269-31-8 CAPLUS
 CN Piperidine, 1-[4-[[1-[(2-amino-3-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, trifluoroacetate (10:27) (9CI) (CA INDEX NAME)

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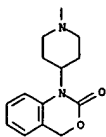
CRW 181269-30-7
 CMP C32 H37 N5 O5

PAGE 1-A



L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 181269-37-4 CAPLUS
CN Piperidine, 1-[4-[[1-[(2,6-dimethyl-4-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, trifluoroacetate (2:5) (9CI) (CA INDEX NAME)

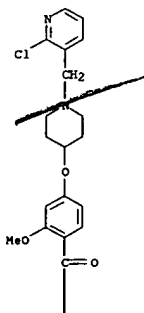
CM 1

CRN 162043-78-9
CMF C34 H40 N4 O5

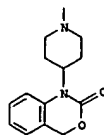
L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 181269-38-5 CAPLUS
CN Piperidine, 1-[4-[[1-[(2-chloro-3-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, trifluoroacetate (20:33) (9CI) (CA INDEX NAME)

CM 1

CRN 162043-80-3
CMF C32 H35 Cl N4 O5

PAGE 1-A



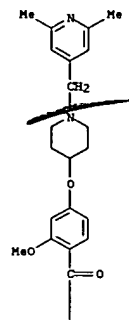
PAGE 2-A

CM 2

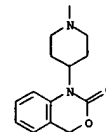
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CMF C2 H F3 O2

L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



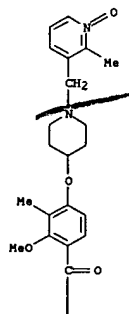
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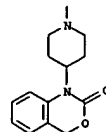
L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

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CN Piperidine, 1-[2-methoxy-3-methyl-4-[[1-[(2-methyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



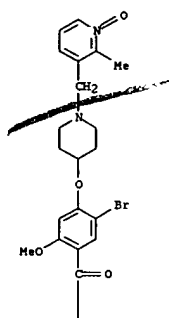
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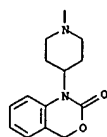
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CN Piperidine, 1-[5-bromo-2-methoxy-4-[[1-[(2-methyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, hydrochloride (2:5) (9CI) (CA INDEX NAME)

L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

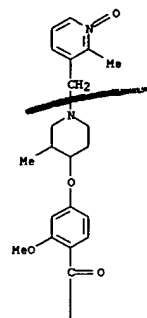


●5/2 HCl

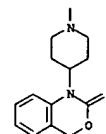
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 CN Piperidine, 1-[2-methoxy-4-[[3-methyl-1-[(2-methyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



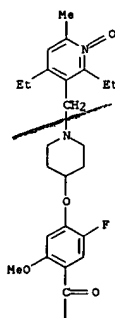
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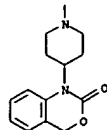
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 CN Piperidine, 1-[4-[[1-[(2,4-diethyl-6-methyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]-5-fluoro-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, hydrochloride (10:7) (9CI) (CA INDEX NAME)

L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

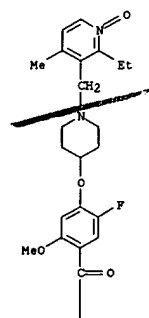


●7/10 HCl

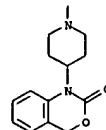
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L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

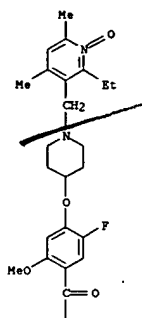


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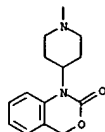
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 CN Piperidine, 1-[4-[[1-[(2-ethyl-4,6-dimethyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]-5-fluoro-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, hydrochloride (2:5) (9CI) (CA INDEX NAME)

L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

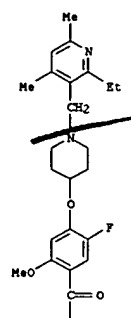


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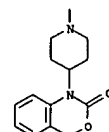
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CN Piperidine, 1-[4-[[1-[(2-ethyl-4,6-dimethyl-3-pyridinyl)methyl]-4-piperidinyl]oxy]-5-fluoro-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, hydrochloride (20:33) (9CI) (CA INDEX NAME)

L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

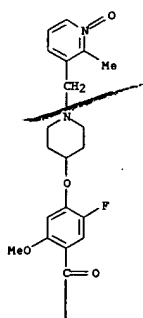


●33/20 HCl

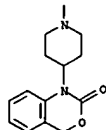
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L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

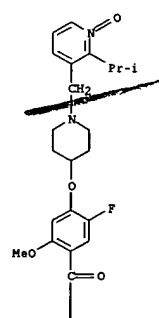


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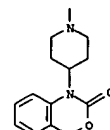
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L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

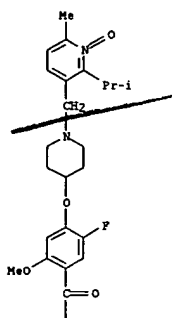


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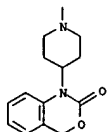
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L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

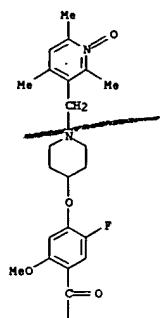


●5/2 HCl

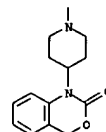
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L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

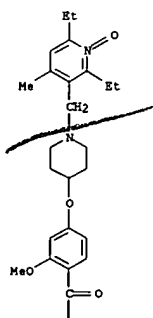


●8/5 HCl

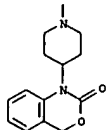
RN 181269-64-7 CAPLUS
 CN Piperidine, 1-[4-[[1-[(2,6-diethyl-4-methyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, dihydrochloride (9CI) (CA INDEX NAME)

L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

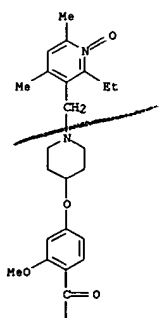


●2 HCl

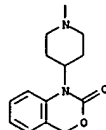
RN 181269-65-8 CAPLUS
 CN Piperidine, 1-[4-[[1-[(2-ethyl-4,6-dimethyl-1-oxido-3-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, hydrochloride (2:5) (9CI) (CA INDEX NAME)

L15 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



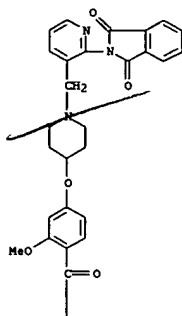
PAGE 2-A



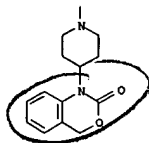
●5/2 HCl

IT 181269-67-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. of Coclytic oxytocin receptor antagonists)
 RN 181269-67-0 CAPLUS
 CN Piperidine, 1-[4-[[1-[(2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



ACCESSION NUMBER: 1995:921838 CAPLUS

DOCUMENT NUMBER: 123:340154

TITLE: Preparation of aromatic bicyclic heterocyclic compounds as serotonergic and dopaminergic receptor antagonists

INVENTOR(S): Kerrigan, Frank; Heal, David John; Martin, Keith Frank

PATENT ASSIGNEE(S): Boots Co. PLC, UK

SOURCE: PCT Int. Appl., 103 pp.

CODEN: PIXXD2

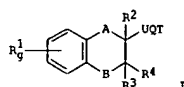
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-------------------|------------|
| WO 9507274 | A1 | 19950316 | WO 1994-EP2904 | 19940901 |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ | | | | |
| RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| IN 179168 | A | 19970906 | IN 1994-MA843 | 19940831 |
| CA 2170056 | AA | 19950316 | CA 1994-2170056 | 19940901 |
| AU 9476928 | A1 | 19950327 | AU 1994-76928 | 19940901 |
| AU 699802 | E2 | 19980409 | | |
| EP 717739 | A1 | 19960626 | EP 1994-927531 | 19940901 |
| EP 717739 | B1 | 20000329 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| CN 1133043 | A | 19961009 | CN 1994-193808 | 19940901 |
| CN 1052723 | B | 20000524 | | |
| BR 9407413 | A | 19961112 | BR 1994-7413 | 19940901 |
| JP 09502431 | T2 | 19970311 | JP 1994-508440 | 19940901 |
| HU 75875 | A2 | 19970528 | HU 1996-552 | 19940901 |
| RU 2136680 | C1 | 19990910 | RU 1996-113203 | 19940901 |
| PL 178270 | B1 | 20000331 | PL 1994-313347 | 19940901 |
| AT 191214 | E | 20000415 | AT 1994-927531 | 19940901 |
| ES 2144528 | T3 | 20000616 | ES 1994-927531 | 19940901 |
| RO 116811 | B1 | 20010629 | RO 1996-406 | 19940901 |
| IL 110844 | A1 | 19991028 | IL 1994-110844 | 19940902 |
| ZA 9406798 | A | 19950406 | ZA 1994-6798 | 19940905 |
| BG 63272 | B1 | 20010831 | BG 1996-100388 | 19960229 |
| FI 9601016 | A | 19960305 | FI 1996-1016 | 19960305 |
| NO 9600888 | A | 19960305 | NO 1996-888 | 19960305 |
| US 5767116 | A | 19980616 | US 1996-605130 | 19960605 |
| PRIORITY APPL. INFO.: | | | GB 1993-18431 | A 19930906 |
| OTHER SOURCE(S): | | | WO 1994-EP2904 | W 19940901 |
| GI | | | MARPAT 123:340154 | |



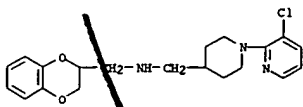
AB The title compds. [1; A, B = CH₂, O; Q = N-contg. (un)substituted bridging group; R₁ = halogen, (un)substituted alkyl, alkoxy, alkylthio, OH, acyloxy, CN, alkoxycarbonyl, (un)substituted carbamoyl, etc.; R₂ = alkyl, alkoxy; R₃, R₄ = H, alkyl; T = (un)substituted N-contg. heteroaryl, benzofuranyl, benzodioxanyl; U = (un)substituted alkylene; g = 0-4], useful as serotonergic, adrenergic, and dopaminergic receptor antagonists, are prepd. and 1-contg. formulations presented. Thus, N-(1,4-benzodioxan-2-ylmethyl)-1-[(3-chloropyrid-2-yl)piperid-4-yl]methanamine 1.4 hydrochloride, m.p. 251-253.degree., was prepd. from 2,3-dichloropyridine and demonstrated a K_i of 1.9 nM against rat brain-derived 5-HT_{1A} receptors.

IT 170352-99-5

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (claimed compd.; prepn. of arom. bicyclic heterocyclic compds. as serotonergic and adrenergic and dopaminergic receptor antagonists)

RN 170352-99-5 CAPLUS

CN 4-Piperidinemethanamine, 1-(3-chloro-2-pyridinyl)-N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)

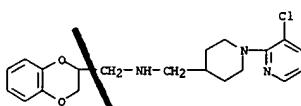


IT 170352-68-8

RL: RAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of arom. bicyclic heterocyclic compds. as serotonergic and adrenergic and dopaminergic receptor antagonists)

RN 170352-68-8 CAPLUS

CN 4-Piperidinemethanamine, 1-(3-chloro-2-pyridinyl)-N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-, hydrochloride (5:7) (9CI) (CA INDEX NAME)

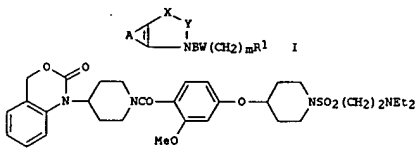


● 7/5 HCl

09/980,451

115 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 AB 1995:470323 CAPLUS
 DOCUMENT NUMBER: 123:276051
 TITLE: Benzoxazinone and benzopyrimidinone piperidinyl
 tocolytic oxytocin receptor antagonists
 INVENTOR(S): Bock, Mark G.; Evans, Ben E.; Hobbs, Doug W.;
 Williams, Peter D.; Anderson, Paul S.; Freidinger,
 Roger M.; Pettibone, Douglas J.
 PATENT ASSIGNEE(S): Merck and Co., Inc., USA
 SOURCE: PCT Int. Appl., 385 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------|------------|
| WO 9502405 | A1 | 19950126 | WO 1994-US7784 | 19940714 |
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| RW: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| AU 9475132 | A1 | 19950213 | AU 1994-75132 | 19940714 |
| AU 691829 | B2 | 19980528 | | |
| EP 714299 | A1 | 19960605 | EP 1994-925092 | 19940714 |
| EP 714299 | B1 | 20020424 | | |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | |
| JP 09500134 | T2 | 19970107 | JP 1994-504656 | 19940714 |
| AT 216580 | E | 20020515 | AT 1994-925092 | 19940714 |
| PRIORITY APPLN. INFO.: | | | US 1993-92840 | A 19930716 |
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| OTHER SOURCE(S): | | MARPAT 123:276051 | | |
| G1 | | | | |

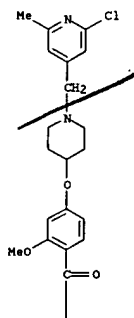


AB Fused N-contg. heterocyclic ring system derivs. I [A completes a 5- or 6-membered carbocyclic or N- and/or S-contg. heterocyclic ring; X = O, NH, (CH2)q, CH2NH, OCH2, CH:CH, S, etc.; Y = CH2, C:O, C:S, C:NH, C:NMe; B =

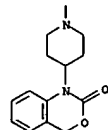
L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 (substituted) N-contg. heterocyclic or heterobicyclic ring; W = CH2, C:O, CO2, SO2, C(=NCH2Ph), etc.; R1 = (hetero)aryl, C1-5 alkoxy, camphor-10-yl] are useful as oxytocin and vasopressin receptor antagonists, e.g. in treatment of preterm labor and dysmenorrhea and in stopping labor preparatory to cesarean delivery. Thus, in competitive radioligand binding assays on rat uterus membrane preps., high-affinity binding of oxytocin-3H was inhibited by 1-[4-[[1-[(diethylaminoethyl)sulfonyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]piperidin-4-yl]-1,2-dihydro-4H-3,1-benzoxazin-2-one (II) with an IC50 of 23 nM. It was prepd. in 7 steps from Me 2,4-dihydroxybenzoate, N-tert-butyl-4-piperidinol, 1-(4-piperidinyl)-1,2-dihydro-4H-3,1-benzoxazin-2-one-HCl (prepn. given), ClCH2CH2SO2Cl, and HNEt2. Prepn. of 277 compds. of formula I is described.
 IT 162043-77-8P 162043-79-0P 162043-81-4P
 162043-82-5P 162043-83-6P 162043-84-7P
 162043-85-8P 162043-86-9P 162044-01-1P
 162044-03-3P 162044-05-5P 162044-11-3P
 162044-14-6P 162044-17-9P 162045-26-3P
 162045-27-4P 162045-28-5P 162046-44-8P
 162046-45-9P 162046-48-2P 162046-49-3P
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (benzoxazinone and benzopyrimidinone piperidinyl tocolytic oxytocin receptor antagonists)
 RN 162043-77-8 CAPLUS
 CN Piperidine, 1-[4-[[1-[(2-chloro-6-methyl-4-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



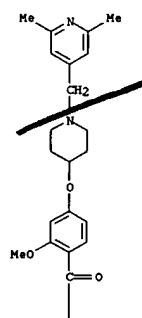
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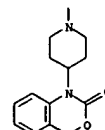
RN 162043-79-0 CAPLUS
 CN Piperidine, 1-[4-[[1-[(2,6-dimethyl-4-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)
 CH 1
 CRN 162043-78-9
 CMF C34 H40 N4 O5

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



CH 2
 CRN 76-05-1
 CMF C2 H F3 O2



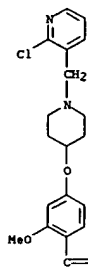
RN 162043-81-4 CAPLUS
 CN Piperidine, 1-[4-[[1-[(2-chloro-3-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, trifluoroacetate

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
(9CI) (CA INDEX NAME)

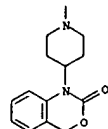
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CRN 162043-80-3
CMF C32 H35 Cl N4 O5

PAGE 1-A



PAGE 2-A

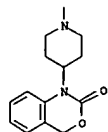


CM 2

CRN 76-05-1
CMF C2 H F3 O2

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

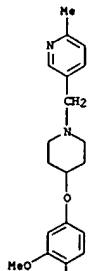
PAGE 2-A



• HCl

RN 162043-83-6 CAPLUS
CN Piperidine, 1-[2-methoxy-4-[[1-[(6-methyl-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

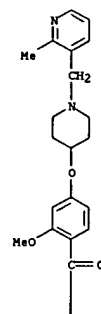


L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

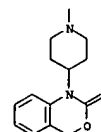


RN 162043-82-5 CAPLUS
CN Piperidine, 1-[2-methoxy-4-[[1-[(2-methyl-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

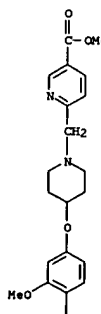


PAGE 2-A



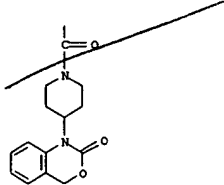
RN 162043-84-7 CAPLUS
CN 3-Pyridinecarboxylic acid, 6-[[4-(3-methoxy-4-[[4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-1-piperidinyl]carbonyl]phenoxy)-1-piperidinyl)methyl]-, methyl ester, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A

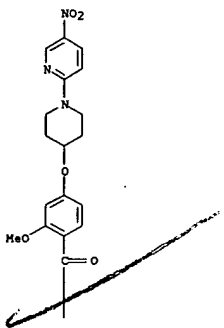


●2 HCl

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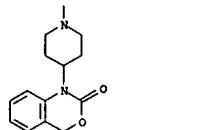
CN Piperidine, 1-[[2-methoxy-4-[[1-(5-nitro-2-pyridinyl)-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A



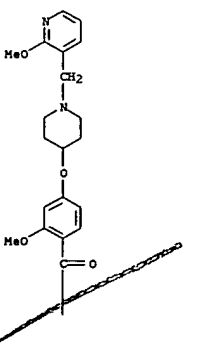
RN 162044-01-1 CAPLUS

CN Piperidine, 1-[[2-methoxy-4-[[1-(2-methoxy-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

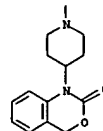
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CMF C33 H38 N4 O6

PAGE 1-A



L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A

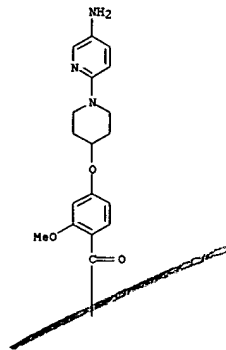


●2 HCl

RN 162043-86-9 CAPLUS

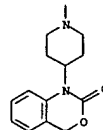
CN Piperidine, 1-[[4-[[1-(5-amino-2-pyridinyl)-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)]-, (9CI) (CA INDEX NAME)

PAGE 1-A



L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 162044-03-3 CAPLUS

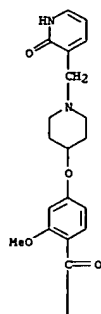
CN Piperidine, 1-[[4-[[1-(1,2-dihydro-2-oxo-3-pyridinyl)methyl]-4-piperidinyl]oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

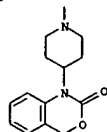
CRN 162044-02-2
CMF C32 H36 N4 O6

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



CM 2

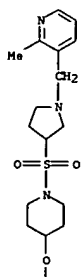
CRN 76-05-1
CMF C2 H F3 O2

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CRN 76-05-1
CMF C2 H F3 O2

RN 162044-11-3 CAPLUS
CN Piperidine, 1-[2-methoxy-4-[[1-[[1-(2-methyl-3-pyridinyl)methyl]-3-pyrrolidinyl]sulfonyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



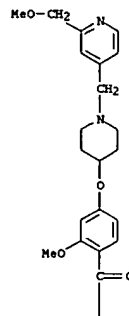
L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 162044-05-5 CAPLUS
CN Piperidine, 1-[2-methoxy-4-[[1-[[1-(2-methoxymethyl)-4-pyridinyl]methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

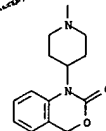
CM 1

CRN 162044-04-4
CMF C34 H40 N4 O6

PAGE 1-A



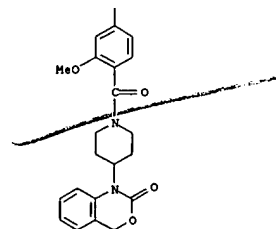
PAGE 2-A



CM 2

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

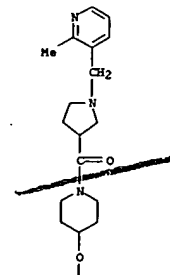
PAGE 2-A



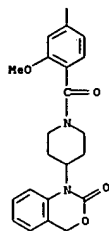
●2 HCl

RN 162044-14-6 CAPLUS
CN Piperidine, 1-[2-methoxy-4-[[1-[[1-(2-methyl-3-pyridinyl)methyl]-3-pyrrolidinyl]carbonyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, hydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



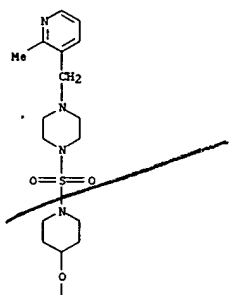
L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
PAGE 2-A



● x HCl

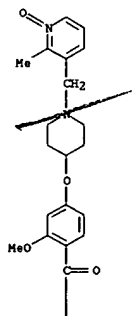
RN 162044-17-9 CAPLUS
CN Piperidine, 1-[2-methoxy-4-[[1-[[4-[(2-methyl-3-pyridinyl)methyl]-1-piperazinyl)sulfonyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

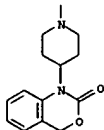


L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



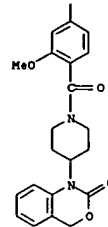
RN 162045-27-4 CAPLUS
CN Piperidine, 1-[2-methoxy-4-[[1-[[4-[(2-methyl-3-pyridinyl)methyl]-1-piperazinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 162045-26-3
CMF C33 H38 N4 O6

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 2-A

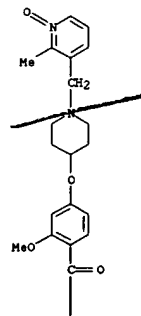


● 2 HCl

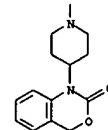
RN 162045-26-3 CAPLUS
CN Piperidine, 1-[2-methoxy-4-[[1-[[4-[(2-methyl-3-pyridinyl)methyl]-1-piperazinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)- (9CI) (CA INDEX NAME)

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



CM 2

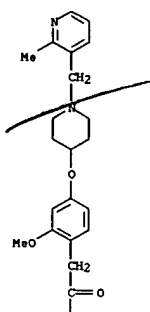
CRN 76-05-1
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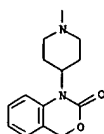
RN 162045-28-5 CAPLUS
CN Piperidine, 1-[2-methoxy-4-[[1-[[4-[(2-methyl-3-pyridinyl)methyl]-1-piperazinyl]oxy]phenyl]acetyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 dibydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

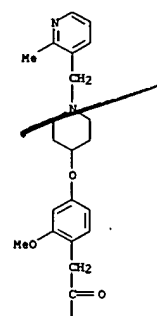


● 2 HCl

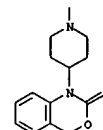
RN 162046-44-8 CAPLUS
 CN Piperidine, 1-[[2-methoxy-4-[[1-[(2-methyl-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)]- (9CI) (CA INDEX NAME)

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



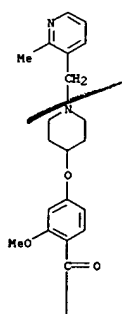
PAGE 2-A



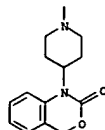
RN 162046-45-9 CAPLUS
 CN Piperidine, 1-[[2-methoxy-4-[[1-[(2-methyl-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)]- (9CI) (CA INDEX NAME)

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



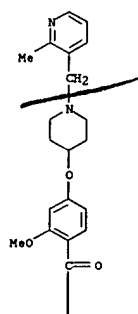
RN 162046-48-2 CAPLUS
 CN Piperidine, 1-[[2-methoxy-4-[[1-[(2-methyl-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)]-, (2R,3R)-2,3-dihydroxybutanedioate (9CI) (CA INDEX NAME)

CH 1

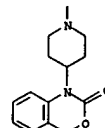
CRN 162046-45-9
 CMF C33 H38 N4 O5

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A



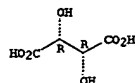
PAGE 2-A



CH 2

CRN 87-69-4
 CMF C4 H6 O6

Absolute stereochemistry.



RN 162046-49-3 CAPLUS

09/980,451

L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 CN Piperidine, 1-[[2-methoxy-4-[[1-[(2-methyl-3-pyridinyl)methyl]-4-piperidinyl]oxy]benzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)-, sulfate (9CI) (CA INDEX NAME)

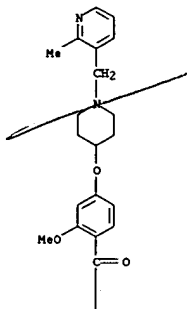
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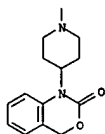
L15 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 CMP H2 O4 5



PAGE 1-A



PAGE 2-A



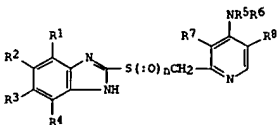
CM 2

CRN 7664-93-9

L15 ANSWER 30 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 ACCESSION NUMBER: 1994:270396 CAPLUS
 DOCUMENT NUMBER: 120:270396
 TITLE: Preparation of pyridyl containing benzimidazoles, compositions and use for treatment of gastrointestinal disorders.
 INVENTOR(S): Ife, Robert J.
 PATENT ASSIGNER(S): SmithKline and French Laboratories Ltd., UK
 SOURCE: U.S. 25 pp. Cont.-in-part of U.S. Ser. No. 92,251, abandoned.
 CODEN: USXXAN
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| US 5250527 | A | 19931005 | US 1988-249209 | 19880923 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1985-790994 | 19851024 |
| | | | US 1987-44880 | 19870430 |
| | | | US 1987-92251 | 19870902 |

OTHER SOURCE(S): MARPAT 120:270396
 GI



I

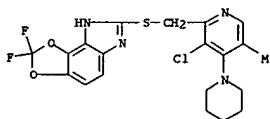
AB Title compds. I (R1-4 = H, halo, F3C, Cl-6 alkyl, Cl-6 alkoxy, Cl-6-alkanoyl, Cl-6 alkoxy-carbonyl, RCF2O, F3-5 substituted EtO wherein R = H, F; R5, R6 = Cl-6 alkyl R5R6N = morpholino, piperidino, and one of R7 and R8 is halo, and the other is H, Cl-6 alkyl, n = 0,1), inhibitors of H+K-ATPase, are prepd. 4-Amino-5-bromo-2-(chloromethyl)pyridine-HCl (prepn. given) and 5-methoxy-2-benzimidazolethiol were reacted to give 2-(4-amino-5-bromo-2-pyridylmethylthio)-5-methoxy-1(H)-benzimidazole which in CH2Cl2 was treated with n-ClC6H4CO2OH to give I (R1 = R3-7 = H, R2 = MeO, R8 = Br, n = 1) which at pH 6.1 and 7.4 inhibited K-stimulated ATPase activity. Pharmaceutical formulations comprising I are given.

IT 103971-40-OP 103971-42-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, for treatment of gastrointestinal disorder)

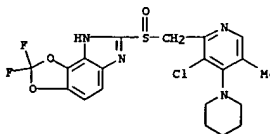
RN 103971-40-0 CAPLUS

CN 6H-1,3-Dioxolo[4,5-e]benzimidazole, 7-[[[3-chloro-5-methyl-4-(1-piperidinyl)-2-pyridinyl]methyl]thio]-2,2-difluoro- (9CI) (CA INDEX NAME)

L15 ANSWER 30 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 103971-42-2 CAPLUS
 CN 6H-1,3-Dioxolo[4,5-e]benzimidazole, 7-[[[3-chloro-5-methyl-4-(1-piperidinyl)-2-pyridinyl]methyl]sulfinyl]-2,2-difluoro- (9CI) (CA INDEX NAME)



09/980,451

L15 ANSWER 31 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:540665 CAPLUS

DOCUMENT NUMBER: 119:180665

TITLE: Preparation of piperidylmethyl substituted chroman derivatives as agents for the treatment of diseases of the central nervous system

INVENTOR(S): Heine, Hans Georg; Junge, Bodo; Seidel, Peter Rudolf; Schohe-Loop, Rudolf; Glaser, Thomas; De Vry, Jean Marie Viktor; Dompert, Wolfgang; Sommermeyer, Henning
PATENT ASSIGNER(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXKXW

DOCUMENT TYPE: Patent

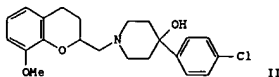
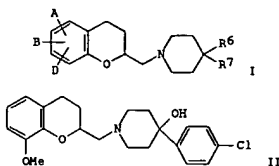
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------------------------------------------|------|----------|-----------------|----------|
| EP 546389 | A1 | 19930616 | EP 1992-120188 | 19921126 |
| EP 546389 | B1 | 19960417 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| DE 4140542 | A1 | 19930617 | DE 1991-4140542 | 19911209 |
| NO 9204547 | A | 19930610 | NO 1992-4547 | 19921125 |
| AT 136896 | E | 19960515 | AT 1992-120188 | 19921126 |
| ES 2087407 | T3 | 19960716 | ES 1992-120188 | 19921126 |
| US 5326771 | A | 19940705 | US 1992-983988 | 19921130 |
| JP 05262766 | A2 | 19931012 | JP 1992-350026 | 19921203 |
| JP 3162523 | B2 | 20010508 | | |
| CA 2084541 | AA | 19930610 | CA 1992-2084541 | 19921204 |
| AU 9229936 | A1 | 19930610 | AU 1992-29936 | 19921207 |
| AU 649901 | B2 | 19940602 | | |
| ZA 9209497 | A | 19930610 | ZA 1992-9497 | 19921208 |
| RU 2102392 | C1 | 19980120 | RU 1992-4592 | 19921208 |
| HU 65525 | A2 | 19940628 | HU 1992-3896 | 19921209 |
| CZ 281714 | B6 | 19961211 | CZ 1992-3612 | 19921209 |
| SK 278557 | B6 | 19970910 | SK 1992-3612 | 19921209 |
| PRIORITY APPLN. INFO.: DE 1991-4140542 A 19911209 | | | | |
| OTHER SOURCE(S): MARPAT 119:180665 | | | | |

GI



L15 ANSWER 32 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1987:516452 CAPLUS

DOCUMENT NUMBER: 107:116452

TITLE: Piperidinylhydantoin stabilizers for plastics
INVENTOR(S): Toda, Shukumasu; Fujita, Takeshi; Kurumada, Tomoyuki
PATENT ASSIGNER(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JXKXAF

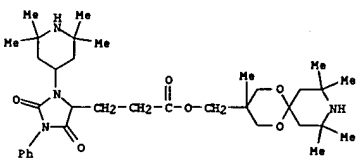
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

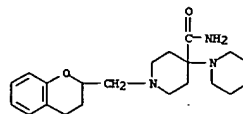
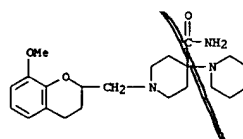
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| JP 62051683 | A2 | 19870306 | JP 1985-190390 | 19850829 |
| PRIORITY APPLN. INFO.: JP 1985-190390 19850829 | | | | |
| AB Piperidinylhydantoin derivs. are heat and light stabilizers for films, fibers, tapes, moldings, coating, etc. Polypropylene contg. 0.2 phr antioxidant and 0.25 phr 1,6-bis[1-(1,2,2,6,6-pentamethyl-4-piperidyl)-2,4-dioxo-3-imidazolidinyl]hexane (I) had Weatherometer degrdn. time 1050 h and heat resistance (180.degree. flex after aging at 150.degree.) 25 days, vs. 180 and 4, resp., without I. | | | | |
| IT 110163-54-7 | | | | |
| RL: PEP (Physical, engineering or chemical process); PROC (Process) (heat and light stabilizers, for plastics) | | | | |
| RN 110163-54-7 CAPLUS | | | | |
| CN 4-Imidazolidinepropanoic acid, 2,5-dioxo-1-phenyl-3-(2,2,6,6-tetramethyl-4-piperidyl)-, (3,8,8,10,10-pentamethyl-1,5-dioxo-9-azaspiro[5.5]undec-3-yl)methyl ester (9CI) (CA INDEX NAME) | | | | |



L15 ANSWER 31 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

AB Title compds. [I: A, B, D = H, halo, cyano, N3, N02, F2HC, F2HCO, F3C, OH, CO2H, alkyl, alkenyl, acyl, alkoxycarbonyl, amino, alkoxy, alkenyloxy; BD = (substituted) 5-7 membered (unsatd.) (arom.) carbocyclyl or heterocyclyl; R6 = H, OH, halo, Ph, piperidinyl; R7 = (substituted) alkyl, Ph, carbamoyl, acyl, etc.], were prepd. Thus, 8-methoxy-2-tosyloxymethylchroman (prepn. given) was condensed with 4-hydroxy-4-(4-chlorophenyl)piperidine using Na2CO3 in DMF at 110.degree. to give title compd. II. II.HCl showed Ki = 22 nM for 5-HT1 receptors.

IT 149979-59-9P 149979-60-2P
RL: SFN (Synthetic preparation); PREP (Preparation) (prepn. of, as serotonin and dopamine receptor ligand)RN 149979-59-9 CAPLUS
CN [1,4'-Bipiperidine]-4'-carboxamide, 1'-[(3,4-dihydro-2H-1-benzopyran-2-yl)methyl]- (9CI) (CA INDEX NAME)RN 149979-60-2 CAPLUS
CN [1,4'-Bipiperidine]-4'-carboxamide, 1'-[(3,4-dihydro-8-methoxy-2H-1-benzopyran-2-yl)methyl]- (9CI) (CA INDEX NAME)

L15 ANSWER 33 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1986:533886 CAPLUS

DOCUMENT NUMBER: 105:133886

TITLE: Substituted benzimidazole derivatives
INVENTOR(S): Ife, Robert John
PATENT ASSIGNER(S): Smith Kline and French Laboratories Ltd., UK
SOURCE: Eur. Pat. Appl., 34 pp.
CODEN: EPXKXW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

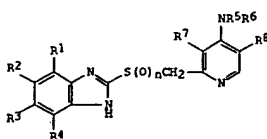
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------------------|------|----------|-----------------|----------|
| EP 184322 | A1 | 19860611 | EP 1985-307928 | 19851031 |
| EP 184322 | B1 | 19891220 | | |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| CA 1253150 | A1 | 19890425 | CA 1985-493978 | 19851028 |
| IL 76870 | A1 | 19890928 | IL 1985-76870 | 19851029 |
| IL 86467 | A1 | 19890928 | IL 1985-86467 | 19851029 |
| FI 8504267 | A | 19860503 | FI 1985-4267 | 19851030 |
| FI 84718 | B | 19910930 | | |
| FI 84718 | C | 19920110 | | |
| AU 8549207 | A1 | 19860508 | AU 1985-49207 | 19851030 |
| AU 576634 | B2 | 19880901 | | |
| DK 8505010 | A | 19860503 | DK 1985-5010 | 19851031 |
| ES 548409 | A1 | 19861201 | ES 1985-548409 | 19851031 |
| AT 48840 | E | 19900115 | AT 1985-307928 | 19851031 |
| NO 8504369 | A | 19860505 | NO 1985-4369 | 19851101 |
| NO 164541 | B | 19900709 | | |
| NO 164541 | C | 19901017 | | |
| JP 61109788 | A2 | 19860528 | JP 1985-246932 | 19851101 |
| JP 03014034 | B4 | 19910225 | | |
| HU 39176 | A2 | 19860828 | HU 1985-4204 | 19851101 |
| HU 200763 | B | 19900828 | | |
| ZA 8508401 | A | 19870624 | ZA 1985-8401 | 19851101 |
| CN 85108133 | A | 19860410 | CN 1985-108133 | 19851102 |
| CN 1013445 | B | 19910807 | | |

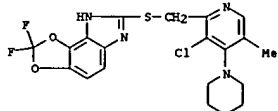
PRIORITY APPLN. INFO.:

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GB 1984-32515 19841221
GB 1985-18043 19850717
IL 1985-76870 19851029
EP 1985-307928 19851031

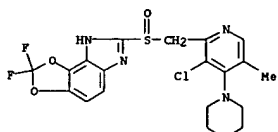
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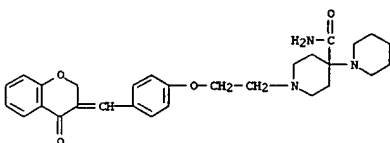
L15 ANSWER 33 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 AB (Pyridylmethylthio)benzimidazoles and sulfonamide analogs I (R1, R2, R3, and R4 are H, halo, CF3, alkyl, alkoxy, etc.; n = 0, 1; R5 and R6 are H, alkyl, cycloalkyl, or NR5R6 = azetidine, pyrrolidine, piperidine, etc.; one of R7 and R8 is halo and the other is H, halo, alkyl) were prep'd., and they exhibited anti-ulcer activity. 5-Methoxy-2-mercaptobenzimidazole was treated with 2-(chloromethyl)pyridine hydrochloride deriv. and NaOH to give I (R2 = OMe, R8 = Br, n = 0, R1 = R3 = R4 = R5 = R6 = R7 = H).
 IT 103971-40-0P 103971-42-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as anti-ulcer agent)
 RN 103971-40-0 CAPLUS
 CN 6H-1,3-Dioxolo[4,5-e]benzimidazole, 7-[[[3-chloro-5-methyl-4-(1-piperidinyl)-2-pyridinyl]methyl]thio]-2,2-difluoro- (9CI) (CA INDEX NAME)



RN 103971-42-2 CAPLUS
 CN 6H-1,3-Dioxolo[4,5-e]benzimidazole, 7-[[[3-chloro-5-methyl-4-(1-piperidinyl)-2-pyridinyl]methyl]sulfinyl]-2,2-difluoro- (9CI) (CA INDEX NAME)



L15 ANSWER 34 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
 NAME)



● 2 HCl

L15 ANSWER 34 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 AB SECTION NUMBER: 1968:467221 CAPLUS
 DOCUMENT NUMBER: 69:67221
 TITLE: Chromanone derivatives
 INVENTOR(S): Hasegawa, Gen
 PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd.
 SOURCE: Jpn. Tokkyo Koho, 8 pp.
 CODEN: JAKKAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

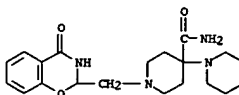
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 42024588 | B4 | 19671125 | JP | 19641219 |

GI For diagram(s), see printed CA Issue.
 AB Dry HCl gas is introduced into an ice-cooled mixt. of 14 g. 4-chromanone, 23 g. 4-(Et2NCH2CH2O)CH4CHO, and 150 cc. MeOH, the whole let stand overnight, and evap'd. in vacuo to give 30 g. I (R' = 4-Et2NCH2CH2O, H, 195.degree. (EtOH-AcOEt). Similarly prep'd. are the following I (R', R, m.p. and/or salt m.p. given): H, 4-(2-piperidinoethoxy), 122.degree.; H, 4-(2-morpholinoethoxy) 120.degree., hydrochloride m. 140.degree.; H, 4-(HOCH2CH2)2NCH2CH2O, hydrochloride m. 148.degree.; H, 4-iso-Bu2NCH2CH2O, 93.degree.; H, 4-Et2N(CH2)3O, 50-2.degree.; H, 4-[2-(4-(2-hydroxyethyl)piperazino)ethoxy], dihydrochloride m. 235.degree.; H, 4-(PhCH2CH2)2NCH2CH2O, 199-200.degree.; H, 2-(2-piperidinoethoxy), citrate m. 95.degree.; H, 2-Et2NCH2CH2O, citrate m. 165.degree.; H, 3,4-MeO(Et2NCH2CH2O), citrate m. 100.degree.; H, 4-PhCH2NCH2CH2O, hydrochloride m. 239.degree.; H, 4-PhCH2CH2NCH2CH2O, hydrochloride m. 240-3.degree.; H, 4-iso-BuNCH2CH2O, hydrochloride m. 214.degree.; H, 4-Me(iso-Bu)NCH2CH2O, hydrochloride m. 197.degree.; H, 4-[2-(4-carbamoyl-4-piperidinopiperidino)ethoxy], dihydrochloride m. 265-7.degree.; 2-piperidinoethoxy, 4-(HOCH2CH2)2NCH2CH2O, (dihydrochloride m. 115.degree.), H, 4-Et2N(CH2)4O, hydrochloride m. 168-70.degree.; HO, 4-piperidinoethoxy, HCl m. 185-6.degree.; piperidinoethoxy, 4-(HOCH2CH2)2NCH2CH2O, di-HCl m. 115.degree.; and the following II (R', R, and same data given): H, 4-Et2NCH2CH2O, hydrochloride m. 213-14.degree.; H, 2-Et2NCH2CH2O, citrate m. 180.degree.; H, 4-(2-piperidinoethoxy), hydrochloride m. 133.degree.; HO, 4-Et2NCH2CH2O, 210.degree.; HO, 4-(2-morpholinoethoxy), 261.degree.; EtO2C, Et2NCH2CH2O, hydrochloride m. 201.degree.; EtO2CCH2O, 4-(2-piperidinoethoxy), hydrochloride m. 210.degree.; EtO2CCH2O, 4-(2-morpholinoethoxy), hydrochloride m. 225.degree.; MeO, 4-Et2NCH2CH2O, picrate m. 167.degree.; MeO, 4-iso-Bu2NCH2CH2O, picrate m. 195.degree.; HOCH2CH2O, 4-(2-piperidinoethoxy), picrate m. 185.degree.; HOCH2CH2O, 4-Et2NCH2CH2O, picrate m. 137.degree.; EtO, 4-(2-piperidinoethoxy), hydrochloride m. 236.5.degree.; and 2-[4-(2-diethylaminoethoxy)benzylidene]-5-methoxy-3-coumaranone hydrochloride m. 206.degree.. The products dilate the coronary artery and are useful as remedies for angina pectoris.
 IT 19415-10-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 19415-10-2 CAPLUS
 CN [1,4'-Bipiperidine]-4'-carboxamide, 1'-[2-[(alpha)-(4-oxo-3-chroman-2-yl)methyl]-, dihydrochloride (8CI) (CA INDEX NAME)

L15 ANSWER 35 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN
 AB SECTION NUMBER: 1968:410446 CAPLUS
 DOCUMENT NUMBER: 69:10446
 TITLE: 2,3-Dihydro-4H-1,3-benzoxazin-4-one derivatives
 INVENTOR(S): Nakanishi, Michio; Tsuda, Atsushi; Kobayashi, Ryosuke
 PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd.
 SOURCE: Jpn. Tokkyo Koho, 3 pp.
 CODEN: JAKKAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 42018630 | B4 | 19670923 | JP | 19640710 |

GI For diagram(s), see printed CA Issue.
 AB 4-Carbamoyl-4-piperidinopiperidine (2.1 g.) is added to a mixt. of 2.6 g. I (R = CH2CH2Br), 1.5 g. NEt3, and 100 ml. PhMe and the whole heated at 60-70.degree. for 5 hrs. to give 3 g. I [R = 2-(4-carbamoyl-4-piperidinopiperidino)ethyl]2HCl m. 248.degree. (decompn.) (MeOH). Similarly prep'd. are the following I (R and m.p. of (x)HCl salt given): 2-(4-piperidinopiperidino)ethyl, 276.degree. (2); 2-(4-carbamoyl-4-dimethylaminopiperidino)ethyl, 216.degree. (2); 4-carbamoyl-4-piperidinopiperidino)methyl, 228.degree. (2); 2-(4-N-methylpiperazinopiperidino)ethyl, 274.degree. (3). The products are analgesics, antispasmodics, and tranquilizers.
 IT 20379-06-0P 20379-07-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 20379-06-0 CAPLUS
 CN [1,4'-Bipiperidine]-4'-carboxamide, 1'-[2-(3,4-dihydro-4-oxo-2H-1,3-benzoxazin-2-yl)methyl]-, dihydrochloride (8CI) (CA INDEX NAME)

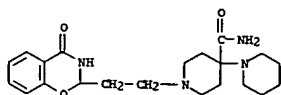


● 2 HCl

RN 20379-07-1 CAPLUS
 CN [1,4'-Bipiperidine]-4'-carboxamide, 1'-[2-(3,4-dihydro-4-oxo-2H-1,3-benzoxazin-2-yl)methyl]-, dihydrochloride (8CI) (CA INDEX NAME)

09/980,451

L15 ANSWER 35 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



● 2 HCl

L15 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

ADMISSION NUMBER: 1964:461579 CAPLUS

DOCUMENT NUMBER: 61:61579

ORIGINAL REFERENCE NO.: 61:10652g-b

TITLE:

2-Hydroxymethylpyridines: 2-(hydroxymethyl)pyridine, 2-methyl-6-(hydroxymethyl)pyridine, and 2,6-bis(hydroxymethyl)pyridine)

AUTHOR(S): Chumakov, Yu. I.; Stolyarov, Z. E.

SOURCE: Metody Polucheniya Khimicheskikh Reaktivov i

Preparatov (1963), No. 7, 65-9

CODEN: MPRPAT; ISSN: 0539-5143

DOCUMENT TYPE:

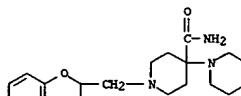
LANGUAGE: Unavailable

AB 2-(.alpha.-Acetoxymethyl)pyridines hydrolyzed with 10% NaOH at 100.degree. 6 hrs. produced the corresponding title compds. (I), (II), and (III), resp. The reaction mixt. was extd. with CH2Cl2 or CHCl3 and the solvent removed by distn. The residue distd. in vacuo yielded 67-9% I, b15 108-9.degree., n20D 1.5430; picrate m. 157.5-58.degree.. In the similar manner II gave 60% yield, b5 80-1.degree., n20D 1.5390. III, m. 114-14.5.degree., was obtained in 60% yield by recrystn. from C6H6.

IT 100150-62-7, 1,4'-Bipiperidine]-4'-carboxamide, 1'-(1,4-benzodioxan-2-ylmethyl)-, dihydrochloride

RN 100150-62-7 CAPLUS

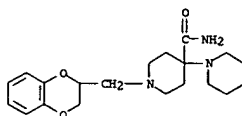
CN [1,4'-Bipiperidine]-4'-carboxamide, 1'-(1,4-benzodioxan-2-ylmethyl)- (7CI) (CA INDEX NAME)



RN 100194-31-8 CAPLUS

CN [1,4'-Bipiperidine]-4'-carboxamide, 1'-(1,4-benzodioxan-2-ylmethyl)-, dihydrochloride (7CI) (CA INDEX NAME)

L15 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



● 2 HCl

L15 ANSWER 37 OF 37 CAPLUS COPYRIGHT 2003 ACS on STN

ADMISSION NUMBER: 1964:461578 CAPLUS

DOCUMENT NUMBER: 61:61578

ORIGINAL REFERENCE NO.: 61:10652f-g

TITLE:

4-Substituted piperidines. I. Derivatives of 4-tertiary-amino-4-piperidinecarboxamides

AUTHOR(S): van de Westeringh, Cornelis; van Daele, Paul; Hermans, Bert; van der Eycken, Cyriel; Boey, Jozef; Janssen, Paul A. J.

CORPORATE SOURCE: Janssen Pharm. Res. Lab., Beerse, Belg.

SOURCE: Journal of Medicinal Chemistry (1964), 7(5), 619-23

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE:

LANGUAGE: Unavailable

GI For diagram(s), see printed CA issue.

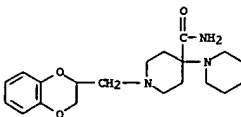
AB A no. of derivs. of 4-tertiary-amino-4-piperidinecarboxamides (I) were prepd. The pharmacol. screening has shown that 1-(.gamma.-butyrophenone) derivs. may be classified as neuroleptic agents, whereas the 1-(.alpha.,.alpha.-diphenyl-.gamma.-butyronitrile) derivs. constitute analgesic agents. The latter compds. elicit relatively minor addiction symptoms.

IT 100150-62-7, 1,4'-Bipiperidine]-4'-carboxamide, 1'-(1,4-benzodioxan-2-ylmethyl)-, dihydrochloride

(prepn. of)

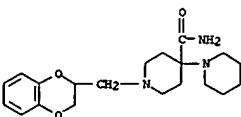
RN 100150-62-7 CAPLUS

CN [1,4'-Bipiperidine]-4'-carboxamide, 1'-(1,4-benzodioxan-2-ylmethyl)- (7CI) (CA INDEX NAME)



RN 100194-31-8 CAPLUS

CN [1,4'-Bipiperidine]-4'-carboxamide, 1'-(1,4-benzodioxan-2-ylmethyl)-, dihydrochloride (7CI) (CA INDEX NAME)



● 2 HCl